

SAFETY

Two Sections - Section One

A MAGAZINE FOR TEACHERS AND ADMINISTRATORS



A safety
program
of the
National
Safety
Council
Inc.
Washington, D.C.

EDITOR'S NOTEBOOK . . .

Our front cover gives you everybody's hero . . . the school safety patrol. He's the particular favorite of the young lady pictured, but everyone from the principal on down to the newest kindergartner is quite as prepared to applaud his daily efforts for the safety of his fellows.

The principal, however, will see the patrol from a slightly larger viewpoint than does the young lady with the candy box (who, being a woman, is just as likely to have her eye on the young man's badge and belt as on his attentions). For the administrator knows that, important as is the school patrol, our hero plays only one part in the total program which will keep young people safe today, prepare them for more constructive living tomorrow.

This issue of SAFETY EDUCATION follows the thinking of the school administrator. We open with heart-felt and seasonal sentiment for the patrol; we pass quickly to the total school safety program. And for this purpose we have asked some experts to point out what their experience has shown to be paramount to such a program, whether at the elementary, the secondary, or the college level.

Thus, we open this issue with Kimball Wiles' delineation of what is involved in "Thinking For Safety." Immediately after, Zenas Clark helps you "Examine Your School Safety Program" and Thelma Reed points out how standard student accident reports can help to "Enliven Your Safety Education." Later on, May Hazard discusses the "Buttons, Badges and Clubs" so dear to the hearts of safety-minded teen-agers; Cum Harvey shows how the school paper can implement the safety program; we describe the "Chain of Safety" begun when Dubuque teen-agers take part in a unique safety contest; and David L. Arm asks colleges and universities what they are doing about safety.

Dead-center in this issue we are proud to present a statement on a matter of constant concern to the administrator. The statement of responsibility for the provision of a safe school environment receives its first publication anywhere in our magazine this month and deserves your careful reading. While the school administrator aware of his further responsibility to keep his safety education program abreast of changing community needs will also find interesting our latest Safety Education Data Sheet, on do-it-yourself activities, and A. R. Lauer's thought-provoking suggestion on one possible way to lower the cost of driver education.

But most probably the item many of you will find of greatest interest in this issue is one of the shortest we carry. The good news regarding reactivation of the Elementary Section and the Higher Education Committee appears on page eight; we will give you more facts regarding this enlargement of our safety education program, and the assistance it offers you in your daily efforts, as soon as details are available.

ALICE M. ROBISON

NATIONAL SAFETY COUNCIL

CHARTERED BY THE
CONGRESS OF THE UNITED STATES

W. S. S. RODGERS, Chairman of the Trustees. (Former Chairman, The Texas Company, New York.)

C. W. PHELAN, Chairman, Board of Directors. (President, Michigan Bell Telephone Co., Detroit, Michigan.)

NED H. DEARBORN, President.

GEORGE C. STEWART, Executive Vice President.

LOWELL B. FISHER, Vice President for Schools and Colleges.

R. L. FORNEY, Secretary.

WAYNE P. HUGHES, Director, School and College Division.

NORVAL BURCH, Editorial Director, Council Publications.

SCHOOL AND COLLEGE SECTIONS AND COMMITTEES

Safety Education Supervisors Section

Chairman: FORREST GAINES, Supervisor of Safety Education, State Dept. of Ed., Baton Rouge, La.

Driver Education Section

Chairman: H. J. STACK, Director, Center for Safety Education, New York University, New York.

Standard Student Accident Report Committee

Chairman: THELMA REED, Principal, Frances Willard School, Kansas City, Mo.

School Transportation Committee

Chairman: O. P. RICHARDSON, Asst. Dir. Div. of Adm. and Finance, Dept. of Education, Montgomery, Alabama.

School Plant Planning Committee

Chairman: THOMAS J. HIGGINS, Director, Division of School Building Survey, Chicago Public Schools, Chicago, Ill.

Judges Committee

National School Safety Honor Roll

Chairman: FORREST E. LONG, Professor of Education, School of Education, New York University, N. Y., N. Y.

Advisory Committee Safety Education Magazine

Chairman: HAROLD K. JACK, Sup. Health and Physical Education, Va., and Member of Board, NSC; Norman E. Borgerson, Adm. Deputy, State Dept. of Pub. Inst., Mich.; Cecil G. Zaub, Sup. of Safety, Los Angeles City Schools; Avis P. Moore, Dir. of Research, The Avery Coonley School, Downers Grove, Ill.; Forst E. Lowery, Mgr., Greater Minneapolis Safety Council, Minneapolis, Minn.

SCHOOL AND COLLEGE CONFERENCE—1954-55

Norman E. Borgerson, Chairman

F. C. Abbott • E. R. Abramowski
Arthur S. Adams • John J. Ahern
Harley W. Anderson • W. W. Bauer
Mrs. P. D. Bevil • Fred L. Biester
Earl H. Breen • Clifford L. Brownell
Percy Bugbee • Lowell Burkett
J. R. Christian • Price E. Clark
Zenas R. Clark • W. A. Cutter
M. R. Darlington, Jr. • H. S. Dewhurst
J. Duke Elkow • Lowell B. Fisher
Forrest Gaines • Don Gavit
Lonnie Gilliland • Norman Gore
J. J. Griffin • P. E. Harrison, Jr.
W. G. Hazard • Fred V. Hein
D. M. Higgins • T. J. Higgins
John W. Hill • Magr. F. G. Hochwalt
Mildred Horton • Harold K. Jack
Stephen James • George Jennings
Helen K. Kandel • Mrs. F. W. Knight
Dalibor W. Kralovec • H. F. Lillie
Forrest E. Long • James W. Mann
Stanley A. Mate • Sarah Miner
M. D. Mobley • M. R. Owens
Alfred L. Papillon • Ronald Patterson
Donald Peters • H. V. Porter
A. H. Pritzlaff • Thelma Reed
E. A. Richards • O. P. Richardson
• Elsa Schneider •
Leslie Silvernale • Herbert J. Stack
Ralph Stinson • J. G. Stratton
Randall C. Swanson • J. E. TePoorten
Edward M. Tuttle • N. E. Viles
Mary Weeks • Mary May Wyman
Cecil Zaun • Robert B. Zimmerman



Contents of SAFETY EDUCATION
are regularly listed in "Education
Index."

S A F E T Y

Education

A MAGAZINE FOR TEACHERS AND ADMINISTRATORS

Volume XXXV No. 6 Section One

Alice M. Robison, Editor
Beverly Thompson, Associate Editor
H. W. Champlin, Advertising Manager

CONTENTS for FEBRUARY, 1956

Of Interest To All

Thinking for Safety	
—Kimball Wiles	2
Examine Your School Safety Program	
—Zenas R. Clark	4
Enliven Your Safety Education	
—Thelma Reed	6
NSC Reactivates Elementary and Higher Education Groups	8
Responsibility for the Provision of a Safe School Environment	
—With comment by Thomas J. Higgins	20
Extra, Extra!	
—Curn C. Harvey	22
Reduce the Cost of Driver Education	
—A. R. Lauer and M. R. Krohn	24
Bulletins—"Pencils"; Applause, Experience	36

Of Specific Interest

Elementary	
Views and Reviews	23
Kindergarten Safety Lesson	26
Elementary Safety Lessons	27
Secondary	
Safety In Do-It-Yourself	
—Safety Education Data Sheet No. 68	11
Chain of Safety	16
Buttons, Badges and Clubs	
—May F. Hazard	18
Secondary Safety Lessons	31
New Books	37
College and University	
What Are You Doing?	
—David L. Arm	8



Chartered by the Congress of the United States

SAFETY EDUCATION is published monthly, September through May, in two sections, by the National Safety Council, 425 N. Michigan Avenue, Chicago 11, Illinois. Entered as second class matter, September 13, 1939, at the Post Office in Chicago, Illinois, under the act of March 3, 1879. Copyright, 1956, by the National Safety Council. Printed in the U.S.A. Subscription price \$3.50 a year. Reduced prices for quantity orders.

Most teachers know that one of their primary jobs is to make safety a part of the everyday life of all boys and girls. The statements below, setting forth the principal ideas of a talk presented at the recent National Safety Congress, is intended to point out to you what is important in your student's . . .



Thinking For Safety

By Kimball Wiles
Professor of Education and Assistant Dean
College of Education
University of Florida



THROUGH safety education we hope that each youngster will:

- ▶ Develop a belief in the value of self and others (to want to live and to want to help others to live.)
- ▶ Become increasingly concerned about making his environment a better place for everyone.
- ▶ Develop skill in solving problems and taking action.
- ▶ Acquire a minimum of safety facts.

We learn safety as we learn anything else. We are learning all the time and each of us learns only what we perceive. We perceive in terms of our background, our needs and our purposes.

A pupil's emotions affect what he learns about safety. If we have this insight we know that a good emotional climate at school and at home is essential to developing positive safety attitudes. Unsafe actions, in fact, may be the result of emotional disturbance. If we wish to teach safety to young people in our schools, we start by helping each pupil to love himself and others. We teach love by showing it. Teachers must accept boys and girls if they are to teach pupils to value themselves and want to be safe. Teachers must go further. They must consider pupils' problems important and be willing to listen as boys and girls talk through their fears.

What pupils learn about safety is determined by their individual purposes. No pupil will learn to be safe until he *wants* to be safe . . . and *not all do*. Let's try to put ourselves in the position of some children. Suppose the only time I receive positive attention at school or at home is when I am hurt or in danger. Suppose I gain acceptance in a gang by driving at 70 miles per hour, no hands. Suppose my father is constantly taking chances and making fun of me if I am cautious. Suppose I am praised for my skill in tackling for throwing my 130 pounds in the way of a bruising 195 pounds. What is my attitude going to be toward safety or toward the people who tell me it is very important?

How do we help pupils see safety as a part of their purposes? We succeed if we connect safety in their minds with something positive that they want to do. Learning how to handle a gun safely in order that a would-be hunter may use a gun or taking driver education in order to drive a car are examples. We make safety a part of other experiences. A sixth grade class, planning for a school camping trip, will study camping safety thoroughly if it is impor-

tant to the overall project.

Pupil perceptions govern what they learn. Our words, or posters, or safety lessons may not mean to the pupil what we think they do. We can't give our pupils our perceptions and understandings. It is necessary instead that we listen to the pupils' interpretations of pictures, posters and situations and relate our safety informations to *their* interpretations. Putting the stress on creativity in class helps us teach more effectively; what pupils create tells us what pupils are learning. A table-top model town will give pupils a chance to work out the answers to particular hazards and will simultaneously demonstrate to the teacher how far her students have perceived the safety situation. By contrast, if we really want to know what our young people have learned about safety, we will avoid fill-in and true or false tests.

Finally, what our pupils learn is controlled by group norms. For adolescents particularly, group norms are far more powerful than textbooks, accident facts or the teacher's word. That's why safety education should always be a pupil project in which youth works together on safety rather than a teacher-dominated, telling situation and why safety activity is more likely to flourish if tied into the prestige organizations of a school.

From what we know about learning, perceptions, attitudes, and emotions are more important in safety education than safety facts or skills. For facts known and behavior do not have a positive correlation. Facts memorized or repeated do not change behavior. But how the individual feels about a fact makes the difference between a safe individual and an unsafe one. Safety educators should keep safety facts at a minimum.

Teaching safety is not telling or directing. It is including a consideration of safety as we help pupils to clarify purposes, organize to carry them out and evaluate results. In this teaching pattern, questioning, listening, suggesting and coordinating are our important tasks. Learning to be safe occurs as people face problems, make decisions, take action and then analyze the results. Each pupil learns what he has perceived and the "content" is his organization of his own experience.

We must utilize the knowledge available as to how learning occurs if we are to become more effective in our efforts to develop the attitudes, skills and knowledge young people need to build a safer community for themselves and their families tomorrow.

As part of every good school safety program we teach children not to run in the halls. But a year-round program of building inspection and floor maintenance is also important to safety.



Is it comprehensive,
preventive
... and positive?

Asks Zenas Clark
Administrative Assistant
Wilmington, Delaware Public Schools



Examine Your

A SCHOOL safety program is comprehensive. It involves many facets and many people. It is preventive and positive.

This is a fine statement, I can hear you say. But how do you translate your words into day-by-day action?

In Wilmington we do it on a year-round basis, in a program which includes building checks, safety education of our young people, and cooperation of all agencies. It is a program which has paid off in demonstrated reduction of accidents to school-age children.

We could start our explanation of our school safety program with any of the three areas of action I have mentioned. Let's begin with inspection of the physical plant.

Every summer, while the buildings are empty of students, we carry on a regular program of thorough cleaning . . . going over windows, walks, furniture and equipment, applying non-slip wax to the floors. But in addition, and annually, each of our school buildings is surveyed for repairs and maintenance by a committee consisting of the chief building engineer, the divisional director, the principal of the school, and the head custodian.

This committee completes a thorough check of both exterior and interior building conditions. The floors, the boilers, electrical services, plumbing . . . all of these are gone over. When

the survey is completed, a repair and renovation schedule is developed, with attendant budget provisions.

Now checking buildings is an undramatic phase of any safety program. But it is an important one . . . which is why much hard work, time and energy are expended each year by members of our staff to make our school structures constantly safer and more efficient. In addition, we have an arrangement with a casualty and surety firm whereby each building is surveyed by one of their people once every three years and any changes or new installations are checked immediately upon completion.

This checking by an outside expert frequently calls attention to things which we, through familiarity, have overlooked. So does our third type of building check which, for want of a better term, I am going to call the "current"

major items rate attention at the start of the year. One is the development of the safest way to school, a second is the fire drill, and the third has to do with civil defense.

Development of the safest way to school for each child is the task of the individual teacher, who works with data supplied by the safety sponsor, the local safety council, the police department, the city traffic engineer and my office. With this material the teacher endeavors to show each child how to come to school safely, taking the route which will provide him with the most safety devices along the way . . . with crossing guards, lights, and properly marked street crossings.

This is particularly important with the younger children, in the elementary grades. The emphasis shifts a bit with the older children, particularly with those who ride bikes or

School Safety Program



With one-sixth to one-third of our children new to a school building every year, fire drill receives emphasis early in the season. So also does the civil defense drill.

check. For if people in our buildings . . . teacher, principal, custodian . . . see conditions which have developed and which could be hazardous, they report these conditions immediately and we take immediate steps to correct them. Moreover, after any severe storm or similar weather incident, each building is automatically and carefully checked for any resultant repairs that are required.

Thus, through organized, continuous checking, we endeavor to keep our school plants safe for children. But we think of safety as not just for, but by young people as well. And we put emphasis on safety by children from the moment they return to school in the fall. Three



Some youngsters will walk to school, others will ride their bikes or use public transportation. Each segment of our school population receives special traffic education.

use public transportation. For these youngsters emphasis is placed upon waiting at the curb until a trolley or bus leaves the coach stop, upon crossing at intersections, and upon bicycle safety procedures.

Another matter receiving emphasis at the first of the school year is the fire drill. Anywhere from one-sixth to one-third of our children are new each year in any one building. They need to learn the routes and other procedures necessary to safety in their particular school structure. Emphasis here is upon safe evacuation rather than mere speed . . . and on desirable conduct during the drill to prevent panic.

Please turn the page

Examine Your School Safety Program, *continued*

The third lesson we endeavor to teach at the start of the year is somewhat like a fire drill, but it has a different purpose. This is the civil defense drill, where children are taught, first, to move into shelter areas upon proper signals and, second, how to conduct themselves in those shelters. We feel this knowledge will be helpful in preventing panic; as such it will prevent panic-accidents as well as save lives in time of necessity.

Instruction in safety in our schools does not end with these first-of-the-year efforts. Around the year, safety is an important part of our course of study. Some time ago a good program

of instruction . . . covering the normal activities of a child's day . . . was worked out for our elementary schools. This program also includes special education projects for holiday safety, safety on buses, and other subjects and times. In the secondary schools all courses of study have, in appropriate places, the necessary data for safety instruction in laboratories, school shops, and the like.

Safety films are of help in this instruction program. So are outside agencies. The Delaware safety council, the local police and fire departments, the city traffic engineer . . . all supply valuable help and guidance to our school

get the facts
out of the file
and . . .

Enliven Your Safety Education

By Thelma Reed

Principal

*Frances Willard School
Kansas City, Missouri*

*and Chairman
Standard Student Accident
Report Comm., NSC*

OFTEN principals and safety education supervisors ask us: can standard student accident report forms help to make a safety education program more effective?

The answer is simple: they can. Speaking as a school principal, the use made of the completed standard student accident report forms in classrooms . . . by pupils and teachers . . . can be a most effective means for enlivening safety education.

Frequently, pupil representatives or the teacher from a class will come to my office and ask for information regarding pupil accidents in our school. They may want just the statistics regarding the number of accidents, days lost from school and where accidents occurred . . . or they may want the descriptions of accidents.

In following up to see what use is made of this information in the classroom, I found that one group used it for graph-making in arithmetic, while another group dramatized the accidents in an oral English lesson. Again, a meeting of our school safety patrols examined the accident reports to see if they could do anything to prevent recurrence of similar accidents. The subject of accident prevention and the costs of accidents was used for a panel discussion by an upper-grade class. In study of first aid one group examined the accident report blanks and planned the kind of first aid, if any, which should have been used in each case. In still another instance, several representatives from a class used the information in

safety program. Their efforts and ours are cooperative . . . and coordinated. So also are efforts within each school building. For each school has a safety sponsor whose function it is to coordinate the safety work within that school, to study the school's accident records, to be a resource person on practices and procedures, and to supervise the school patrol and/or other safety organizations.

Is our program working? It is. The proof lies in the 1954 accident statistics. I have been privileged to participate in the development of the National Safety Council standard student accident reporting system; we have used it in the Wilmington public school system for many years. From the 1954 forms we learn: the national accident rate per 100,000 student days that year (as reported in 1955 ACCIDENT FACTS) was 16.4, whereas ours was 12.5. The

national average number of days lost per accident was 2.1; ours was 1.7 days.

During 1954 we had 11 accidents in which a motor vehicle operated by a non-school person caused 78 days of absence. These 11 accidents were three per cent of the total number of accidents reported, yet they caused 13 per cent of the total time lost. If these accidents could have been prevented, the severity rate absence per accident for the entire system would have been reduced from 1.7 days per accident to 1.2 days per accident. This would have been about half a day less suffering and loss of school in each case. As we re-examine our school safety program in light of the standard student accident reporting statistics, one fact is increasingly clear: traffic safety education obviously merits the time and emphasis it receives throughout each Wilmington school year!

an informal discussion of accidents on a local radio broadcast.

When accident facts gathered by means of the standard student accident report blanks are used in these ways, readiness for safety learnings is no problem for the classroom teacher.

In our school system a monthly summary is prepared in each school. This summary and copies of the original accident report form are sent to the central office. These summaries are used to point up the accident problems and the areas where teaching emphasis is needed both by the central office staff and by the local school staff.

In an elementary school the number of accidents each month is small, but a single accident is sufficient to cause a closer look at buildings, grounds, and the safety program to see what modifications need to be made. An accident on playground apparatus may indicate a need for review of safety rules and follow-up by the teacher to see if they are being observed. An arm fracture as the result of tripping over toys at home gives an opportunity for teaching good housekeeping.

An accident report on the standard student accident report form, or on any other form, which goes into the file and stays there is of little value to any safety educational program. To be an effective means to safety education, the report must find its way back to its origin—the everyday activities of children.



When children know where, when, and how school-day accidents occur . . . and when they translate those facts into classroom activities . . . safety education becomes more effective.

NSC Reactivates Elementary and Higher Education Groups

December action by Council Board of Directors enlarges School and College Division program; two professional staff members to be added.

THE Elementary School Section and the Higher Education Committee of the National Safety Council, both inactivated some years ago, have been reactivated.

Action on both groups came at the December meeting of the Council Board of Directors, which authorized addition of two staff members to the School and College Division to provide professional assistance for the newly activated safety education programs.

The campus safety committee will function as one part of the higher education program, Wayne P. Hughes, director of the School and College Division, has announced. John W. Hill, director, Workmen's Compensation Insurance, Texas A&M College System, and Vice Chairman for Higher Education, School and College Conference, was elected chairman of this group at their recent annual meeting.

Further information on enlargement of the School and College staff to service the Higher Education Committee will be announced in the near future; the reactivation of the elementary program is scheduled for July, 1956.



The college provided a rubber apron to protect clothing; where are the goggles to protect eyes?



What

Industry claims that colleges and universities are doing a poor job of educating for safety. Are your graduates prepared to carry out future careers without harm to themselves and co-workers?

SEVERAL years ago I had the rare opportunity of spending a year on leave of absence from my academic position with one of the great chemical companies—a company which has had good programs of accident prevention during the 104 years of its existence.

On my first day, the man who occupied the office next to mine told me that he would like to spend part of the year educating me to the "lousy job" colleges and universities were doing. It developed that he was safety superintendent of one of the major divisions of the company. His comments were directed toward the lack of effort which colleges and universities, in general, were exerting in the cause of safety.

During that year I had an opportunity to learn that this safety superintendent was correct. We were doing a poor job.

Modern industry, interested in protecting its

By David L. Arm
Manager
Industrial Department
National Safety Council

Are *You* Doing?

employees from accidental injury and death on and off the job, demands that every new employee be properly oriented into safe ways of working, and that he develop the habits of thinking which will lead to safe performance of every act 24 hours a day. Industry realizes that a good safety program is good business.

There are only a few colleges and universities which recognize the value of developing in their students the state of mind which enables them to accept these industrial safety methods and regulations which companies require. Few colleges realize that they are morally obligated to see that everything that can be done is done to insure protection of their faculty, staff and students from accidental injury.

Parents have the right to expect that not only will their sons and daughters be educated properly, but also that they will be protected from accidents while under the jurisdiction of the college.

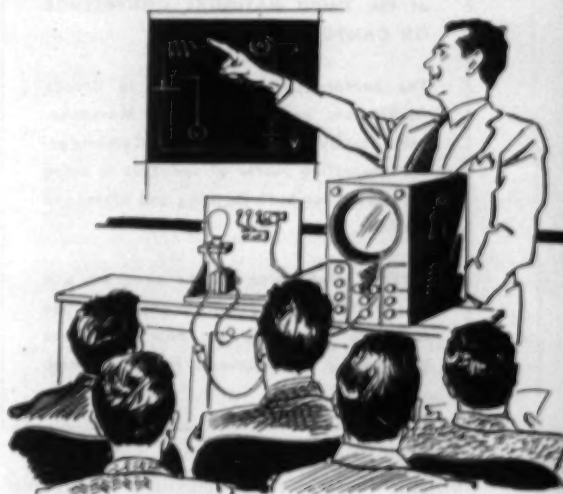
Over the past 25 years I have served in every academic rank and have been a member of the faculties of four different colleges and universities. I know that when any suggestion of a new program is made, the first thing thought of is: "Let's teach a course."

We don't believe that this is the proper solution. Everyone connected with academic life knows that the typical attitude of students toward any course, be it in English, mathematics, history, chemistry, electrical engineering or even safety, is that it is something to be completed, and, after it has been passed, is something which is gone and forgotten forever. We suggest that the best kind of safety education occurs when safety is integrated into every campus activity. This is exactly what industry has done in promoting successful campaigns of accident prevention in every activity in which employees engage.

Many of my friends will insist that the colleges in which they serve never have accidents.

This is based upon ignorance of the problem. Colleges *do* have accidents. They have a lot of accidents, and if their accident frequency and severity rates were calculated on the same basis as industry calculates its rates, the contrast between colleges and universities and industry would be very unfavorable to the educational institutions.

The trouble is, few colleges keep complete



accident records. Even if they do, they seldom analyze those records to find out exactly what their experience has been and what they can do to eliminate hazards.

In *Accident Facts* for 1955 there is a summary of frequency of student injuries at 11 colleges which participated in a special 1953-54 survey conducted by the American College Health Association and the National Safety Council. In these 11 schools one student in nine was injured during that school year, and one injured student in 11 was hospitalized. The range of injuries varied among the schools from one in four to one in 25. I daresay that

the frequency of injuries on the faculties and staffs of these colleges was even higher, especially among the buildings and grounds workers and the food service organizations. No self-respecting industrial organization would allow such a record to accumulate over a nine-month period.

Integration of safety into all activities on a campus is a difficult thing to accomplish. Professors in hazardous types of courses will solemnly assure you that they "have been teaching the course for 30 or 40 years and have never had an accident to any student or member of the faculty." They honestly believe this, because when an accident occurs it isn't their responsibility and they pay little attention to it. Once records are kept, however, it turns out that frequency rates on campus are higher than

April 30, May 1, and May 2 are the dates of the THIRD NATIONAL CONFERENCE ON CAMPUS SAFETY.

The conference will be held in Kresge Auditorium, on the campus of Massachusetts Institute of Technology, Cambridge. An interesting roster of speakers is being assembled for both morning and afternoon sessions.

Further information on the program will be available later; we suggest that you mark up your calendar now and make preliminary arrangements to be on hand.

in many of the so-called hazardous occupations in industry.

How can this integration be achieved? By determining what the hazards are in every facet of college life, correcting physical conditions which can be corrected and educating those who are subjected to the remaining hazards in the proper methods of accident prevention.

Accident prevention should be taught in every course where it naturally would occur. This is not to suggest that safety be dragged "by the scruff of the neck" into any and all courses. However, in laboratories, in design courses, in courses in economics and sociology and in many other types of courses, particularly in the science and engineering fields, safety can

be introduced unobtrusively but successfully, as a natural part of the subject matter.

If a well-thought-out program is introduced in this manner, so that the student is taught safety from the moment he first appears for freshman orientation until the day of his graduation, it will become second nature to him. It will not seem to him to be something extraneous or superficial either in college, on the job after graduation, in his home, or in traffic.

A few of the hazards which exist on a campus will be illustrative.

Most college freshmen are required to take one laboratory science course . . . biology, physics, or, for the large majority, chemistry.

In chemical laboratories most accidents are of two categories. One results in eye injury because of the spattering or boiling over of solutions, the other is due to faulty methods of handling glass equipment, particularly tubing. Most college chemistry departments require students to buy laboratory aprons in order to protect their clothing. But there are very few colleges which require the purchase, and insist upon the use of, either face shields or safety glasses while in the laboratories.

This is purely a question of values. The college is interested, apparently, in protecting the student's clothing. Clothing can be replaced, even though at some cost, but the sight of some student's eyes is irreplaceable.

Many experiments in physics require the use of either alternating or direct current, usually at approximately 110 volts, but sometimes at higher voltages. One seldom sees any piece of electric equipment in any college physics laboratory which is properly grounded, either through the use of a three-pronged plug or through the use of a grounding wire attached to the outlet plate.

How much control does a college or university exert over the hazards in student rooming facilities, particularly in fraternities and rooming houses? Are there proper fire escapes? Is good housekeeping stressed so that no accidents due to falls or fire hazards occur? Are clear-cut safety and fire regulations rigidly enforced by the college administration for the conduct of these places? Are there overloaded electric circuits in some of the older dormitories? Are stairs clearly marked and well-lighted?

At university social functions is there sufficient competent supervision to see that fires are not started? Are decorative materials flame-proofed?

Please turn to page 40

SAFETY in "Do-It-Yourself"

Safety Education
Data Sheet No. 68



Statistics

1. The growth of the do-it-yourself trend has been phenomenal since the end of World War II. While exact statistics are not available, some estimates have set the number of persons involved in these activities in the United States at 12,000,000, with the number increasing each year. As an example, in Chicago a first annual do-it-yourself show in 1955 attracted more than 107,000 visitors in less than one week.

The Problem

2. Statistics are likewise not available on the number of persons injured nationwide annually in these activities. However the need for more instruction in do-it-yourself activities becomes obvious as many more people move into these hobbies with, in many cases, more enthusiasm than preparation for the work.

3. Some insurance studies have indicated that, even in the high school, a good portion of the student body *not* enrolled in shop classes is using power-driven woodworking machinery without instruction in safe practices. The school shop can and should extend its program, thus assuring better preparation for the home craftsman, young and old.

Attitudes

4. In the do-it-yourself activities the craftsman is on his own a great deal of the time. It is important that he have good attitudes toward safety. He must cultivate the habit of watching

for hazards; then he must be willing to take the time and precautions to work around them. He should read about and study processes before attempting to perform them.

Equipment

Ladders:

5. In 1954, 13,250 persons aged 15 and over were killed in home falls. Nearly 12,000 of those killed were over 65. Nevertheless, it is probable that some of those killed and injured in home falls, were "Mr. Fixits" either using a ladder improperly or using something else when they should have been using a ladder. Boxes, crates, tubs and tin cans make poor substitutes for a good sound ladder.

6. The ladder should be placed on solid non-slippery footing. The bottom should be one-fourth the ladder length away from the building.

7. Feel free to reach out to arm's length on either side when you are on a ladder. But when your body is bent to lean out you have entered the danger zone. Get down and move the ladder; don't lean out to reach the work.

8. Avoid standing on the top step of the step ladder; get a longer ladder if needed.

9. The do-it-yourself worker will find so many uses for ladders that he should provide them to fit his particular needs. Cleaning gutters, fixing the roof, painting the outside of the house or repairing the chimney can all be done in greater safety if you will use a ladder of proper length.

10. Handling storm windows from a ladder is dangerous. Provide storm windows with the type of hangers which make it easy to remove



NATIONAL SAFETY COUNCIL
425 N. MICHIGAN AVE., CHICAGO 11, ILL.
Copyright 1956

them from the inside of the house. This kind of hanger can be obtained at any hardware store. Screens should be handled the same way.

11. Any split, checked, rotted or otherwise deteriorated ladder should be burned or broken up completely.

Safety Gloves and Glasses

12. It is easy to see how a home mechanic can be injured as he repairs a broken window pane. When handling broken glass, use a good pair of leather work gloves. The gauntlet type gives protection to the wrists also.

13. Where possible, take the sash to the work bench for repair. This is especially true of upstairs windows, where use of the ladder is an added hazard. Remove all fragments of glass carefully so they will not drop out to cut feet or legs.

14. *Wear safety glasses when chipping putty and glass from the sash rabbet.*



Hand Tools

15. Hand tools account for many accidents to the handy man. Both use and storage are important safety considerations.

16. A tool board in the home shop is strongly recommended. This makes the tool readily available and in safe position for use.

17. Where it is necessary to store tools in a box or drawer, keep all cutting edges, such as chisels and drills, in separate containers. Knives and hatchets should have cutting edges protected.

18. Arrange a drawer or tool box so that it is not necessary to paw around in it to find the proper tool.

19. Keep hand tools sharp and in good re-

pair. Cracked chisel handles or hammer handles should be replaced. Grind away the mushroomed edge on cold chisels.

20. Loose handles should be replaced or wedged.

21. Stab wounds from the chisel may be avoided by the rule of keeping both hands behind the cutting edge at all times.

Power Tools, General

22. The average handy man in this country probably has between two and three power-driven tools in his shop. Accidents come from misuse of this equipment. Certain principles of safe operation cut across many combinations of these machines; strict compliance with these principles will help in the full enjoyment of the hobby.

23. On power tools, avoid use of short pieces of material too small to hold. Hold these small pieces in the bench vise and work on them with hand tools.

24. Disconnect the cord or pull the main switch whenever the saw blade or cutter knife is handled. Do not trust snap switches.

25. Be sure you follow the manufacturer's directions on use of your saw. Even better, read a good book on the safe operation of the type of equipment.

26. When turning off power, do not leave machine until equipment has stopped turning.

27. Loose clothing should be avoided when operating power tools. Remove jewelry, roll sleeves above elbow, cover loose hair, do not wear gloves.

28. Where there are children or untrained persons who might experiment, lock out power supply and remove blades or other cutting tools before leaving your equipment.

29. Provide yourself with an eye shield. The plastic type will cover eye-glasses and offer fine protection.

30. Clean all machines with a bench duster, not with the hands. Keep the floor clean around machinery.

31. Make all adjustments and set ups with the power dead and the machine at rest.

Power Tools

32. All portable tools should be grounded.

Circular Saw

33. The circular saw is the work horse of the shop. There are two ways in which it may injure the worker. It may cut, but it also may kick back work, which is a characteristic of several of the common workshop tools.

34. Under no circumstances should any one run a board over this machine without the use of either the rip fence or the cut-off guide. Freehand operation of this machine must never be attempted.

35. Adjust the fence and lock it securely, raise the blade so that it comes through the wood by not more than one-eighth of an inch, and use a push stick. Wear an eye shield.

36. Kicks usually come from between the rip fence and the saw blade. It is safer to stand a little to the left of the saw line so that the wood will not hit the body in case of a kick.

37. Use the rip fence for ripping and the cut-off guide for cut-off. Do not use them together.

38. Be sure the saw is equipped with a guard . . . and use it! Cover guards should be equipped with kickback dogs and a splitter.

39. Beware of loose knots, checks or shaky boards where fragments may come loose and be thrown by the saw. Boards which are warped and do not lie flat on the table may bind the saw and cause a kickback.

40. Inspect the saw blades periodically for cracks. Cracks usually start at the gullet of the tooth and appear as a fine dark line. A small clean hole may be drilled at the end of the crack to keep it from extending, but for maximum safety destroy the defective blade.

41. Where the moulding head is used on the saw, try to cut the moulding on a wide board and rip it off afterwards. Where thin pieces are used, it is well to clamp a holdown block to the fence and another to the table to hold the wood against the head. This will take the flutter out of the wood and the operator will not be tempted to get fingers in close to the knives.

42. Grinding wheels should not be put on the circular saw mandrel.



The Jointer

43. The jointer is a familiar tool in a great many home workshops. There are some important considerations in its safe operation. The knives do not stay sharp too long and therefore have to be removed and ground periodically. If possible, have them ground in a well-equipped shop where they may be weighed and kept in balance. The head should be numbered and the knives numbered so that they are returned to the same position in the head. Use a straight hard wood block and set the knife so that the cutting edge is right in line with the outfeed table. Be sure the knife slots and clamps are clean—a particle or grit may cause the knife to come loose and be thrown out. It is important that the knives be locked securely in place before the machine is started. Set all knives exactly in line with the left of the head so that if desired the machine may be used safely for rabbeting.

44. Be sure jointer is equipped with a guard—and use it. Home workshop jointers usually have no protection over the knives back of the fence. Devise some sort of guard for this part of the jointer.

45. Short boards are dangerous; they may be kicked out from under the fingers by the downward pull of the jointer knives. Play safe with the larger jointers by using a board at least 10 inches long. A 12 inch board can be well controlled by any jointer. Use a combination hold-down and push block on all flat surface planing jobs and on *all* short stock planing jobs.

46. When flattening a board, use a push block, do not bear down immediately over the cutter head, and do not allow the hands to extend over either end of the work.

The Shaper

47. Shaping is important; there are so many varieties of the work. Most manufacturers of small power tools for home craftsmen are producing a spindle shaper. A speed changer for the drill press is now being sold; it makes routing and shaping a part of this machine. One power hand drill has a gearing device that gives it the speed and power to do most of the routing and shaping work in the home shop. Some of the combination machines incorporate shaping and routing and mortising devices. The regular shaper is an extremely hazardous machine and other machines used as shapers add new hazards to this work.

48. To get the maximum good for his lim-

ited equipment the home craftsman must understand the operating and safety principles of all these machines, even though he may have only one piece of equipment.

49. The safest shaper cutter is the three-lipped one-piece type.

50. Most shapers have a reversing mechanism which makes it possible to set the shaper up with all unused portions of the blade below the table and the wood covering the rest. This cannot be done where the machine cannot be reversed, as in the case of the drill press, router, etc.

51. *Be sure of the direction of rotation and feed against the cutting edge. Never back up.*

52. When setting up, see that the leading edge of the knife is in the leading position and that the beveled edge trails in the rotation.

53. Straight work is run against a fence and contour work is run against a collar. The collar is a metal disc which the wood rubs against. The size of the collar determines how far the cutter can bite into the wood. Where the entire edge is to be milled, a pattern must be attached to the wood so that the collar can ride against pattern. *Never start on a corner on a collar job.*

a. A cover guard should be used for all shaper operations. Such guards can be made of wood and should be attached to shaper table top with machine bolts.

54. Defective materials must not be used on the shaper.

55. Small pieces require special holding devices which will keep the hands away from the knives.

56. Flat hand operation is the best practice. The hands are kept away from the edges of the work so that any kick or spin may throw the work out from under the hands rather than draw them into the spindle. The hands drop flat to the table.

Other Woodworking Equipment

57. For information covering the safe operation of the band saw, wood and metal cutting lathes, and grinders refer to: Safety Education Data Sheet Number 41—*Home Workshops*.

Electric Hand Tools

The Hand Drill

58. The small quarter-inch hand drill is a popular tool. There are a few pointers on its safe use which also apply to the drill press (though the drill press is thoroughly covered in Safety Education Data Sheet Number 41—*Home Workshops*.)

59. It is good practice to wear safety glasses when using the electric hand drill.

60. Don't lay the drill down until it has stopped, especially when using polishing or buffing parts.

61. Regular auger bits are dangerous to use in power drills as the lead screw engages too fast and will have a tendency to whip the work.

The Power Handsaw

62. Always be sure the switch is in off position when you plug in your power handsaw. This is also true for sanders and tools which might run away if the switch were on when the plug is attached.

63. Pull the plug when the blade is changed or handled for any reason.

64. Short pieces are not safe when held either by the hand or foot. When cutting short pieces clamp them down or cut them by other means.

65. The teeth should be set quite a lot so



Reading the book on how to run the new power lawn mower is a good idea; but it should be done before the job is started.

that the saw may be turned slightly to follow the line.

66. Do not stand directly in the saw line. If the blade binds, this saw has a tendency to kick back out of the cut; your leg could be severely cut.

67. Hold the saw well away from the body even after the current is turned off.

The Power Lawn Mower

68. One survey has estimated that almost 92 per cent of the people who live in single dwelling units of our land cut their own grass. More and more are doing it with power equipment. One of the most popular mowers is the electric rotary type. This one has a propeller-like blade which whirls flatwise just above the ground. It is well housed and guarded as well as quiet in operation.

69. It is not safe to operate this electric machine in wet grass.

70. Beware of the rotary mower when just

turned off; this one "coasts" a long time and very quietly.

71. Wear good sound shoes; watch carefully that you do not back the machine up over your toes. Do not try to free clogged machine by kicking or by reaching in it with hands. Stop machine to clear it of debris.

72. The lawn must be free of loose stones and sticks as this whirling blade can throw them with great force for long distances.

73. Do not handle the blade of either the rotary or reel type unless power is shut off. Gas models should have the ignition wire disconnected; a hot gas engine may start when the blade is rotated.

74. Fill the gas tank out-of-doors while the engine is stopped. Complete the filling before you start. Filling the tank of a hot engine may cause a flash fire.

75. All belt-driven machines are a danger to loose clothing and to fingers and hands. See that the belt is guarded.

Paint-up, Clean-up

76. Quick drying paints that dry by evaporation of a volatile solvent, which has properties similar to those of gasoline, should be used only in well-ventilated rooms. Any sources of ignition should be kept away from the paint until it is thoroughly dry.

77. Never place a can of paint on a stove to heat. If it is necessary to heat paint, place the can in a pan of hot water away from the stove.

78. Paint removers, except those mixed with water, give off highly flammable vapors and

should be used only in well-ventilated places where there is no possible source of ignition.

79. Similarly, carbon tetrachloride or similar fluids should be used only in well ventilated rooms. Otherwise a dangerous, even fatal, toxic condition can result.

80. Most manufacturers now finish toys with paints free of lead; the householder fixing-up a toy for his own child or to give away should be equally careful that he re-paints with a paint free of lead compound.

Housekeeping

81. Keep the floor of your home workshop free of oil and grease; these are slipping hazards.

82. Store materials in such a way that they cannot be tripping hazards.

83. Put hand tools away when not in use.

84. Use a metal can with a tight cover for oily rags or waste and for paint rags. If there is no can available, the rags may be hung singly and exposed to air on all sides. Dispose of rags when you are through working, but don't throw them in the furnace. They ignite with explosive force.

85. Store flammable liquids in tightly closed containers, and store paints, lacquers and thinners in covered cans in a metal cabinet. Do not store those items near a heater or furnace.

86. Sawdust and wood shavings are fire hazards; be careful around them when using matches or open flame of any kind.

This data sheet written by Nicholas P. Stumpf, instructor, Maine Township High School, Des Plaines, Ill.

Other Safety Education Data Sheets available are:

- | | | |
|--|---|---|
| (1) Bicycles | (24) Places of Public Assembly | (48) Unauthorized Play Spaces |
| (2) Matches | (25) Fireworks and Blasting Caps | (49) Bathroom Hazards |
| (3) Firearms, Rev. | (26) Domestic Animals | (50) Safety in the General Metals Shop |
| (4) Toys and Play Equipment | (27) Swimming | (51) Safety in Pupil Excursions |
| (5) Falls | (28) Small Craft | (52) Highway Driving, Rules, Precautions |
| (6) Cutting Implements | (29) Play Areas | (53) Safety in the Machine Shop |
| (7) Lifting, Carrying and Lowering | (30) Winter Driving | (54) Summer Jobs: laborers, home yard, service-stations |
| (8) Poisonous Plants | (31) Night Driving | (55) Motor Vehicle SPEED |
| (9) Electric Equipment | (32) Winter Sports | (56) Welding and Cutting Safety |
| (10) Pedestrian Safety | (33) Traffic Control Devices | (57) Safety in the Auto Shop |
| (11) School Buses—Administrative Problems (Rev.) | (34) Safe Conduct in Electrical Storms | (58) Winter Walking |
| (12) Flammable Liquids in the Home | (35) Poisonous Reptiles | (59) Safety in the High School Chemistry Laboratory |
| (13) Passenger Safety in Public Carriers | (36) Motor-Driven Cycles | (60) Safety in the Farm Mechanics Shop |
| (14) Chemicals | (37) Animals in the Classroom | (61) Floors in the Home |
| (15) Hand Tools | (38) Railroad Trespassing | (62) Hazards of Discarded Iceboxes and Refrigerators |
| (16) Nonelectric Household Equipment | (39) Bad Weather: Hazards, Precautions, Results | (63) School Bus Safety: Educating Pupil Passengers |
| (17) Sidewalk Vehicles | (40) School Parties | (64) Safety in the Graphic Arts Shop |
| (18) Camping | (41) Home Workshops | (65) Safety on Part-Time Jobs: Food Handling |
| (19) Alcohol and Traffic Accidents | (42) Horseback Riding | (66) Baby Sitting |
| (20) Cooking and Illuminating Gas | (43) Hiking and Climbing | (67) School Dramatic Productions |
| (21) Solid and Liquid Poisons | (44) Hook and Line Fishing | |
| (22) Safety in the Gymnasium | (45) Summer Jobs—Farm | |
| (23) Laboratory Glassware | (46) Safety in the Wood Shop | |
| | (47) School Fires | |

Data sheets from SAFETY EDUCATION are available for a small fee from the National Safety Council, 425 N. Michigan Ave., Chicago 11, Ill.

They surprise their teen-agers
and set up a . . .

Chain Of Safety

Selected Dubuque high school students participate in an annual surprise contest, thereby become representatives of their schools to the sponsoring city safety council.

A NEW idea in safety contests—a *surprise* contest—has been the project of the Dubuque Safety Council, of Dubuque, Iowa, for the past three years, and it has lent a new flavor to safety competition among high school students in that city.

The surprise: student entrants, selected one from each school, don't know what type of safety contest they are in until they arrive at a luncheon meeting of the Safety Council. After finishing their luncheon and listening to the business meeting, the students are told what they must do to win the contest. Sometimes they must describe an accident picture shown to them. Sometimes, as in the contest past November, they must work up an introduction to a film on safety. Sometimes they must write an editorial for a newspaper on a specific safety problem. But they find out what they are to do just before they do it. And they get *only 45 minutes to complete the job.*

When the required time has elapsed, papers are collected and handed over to a judge. Then the entrants are taken on an interesting tour of city and county buildings and enterprises, such as the court house, the newspaper. Their tour is led personally by the sheriff of Dubuque County and the Chief of Police.

That evening, there is a large banquet, to which contestants are invited *with* their parents. There, the winner of the afternoon contest is presented with a gold plaque for his or her

school, a medal for himself. Runner-up is given a silver plaque and a medal, and a bronze plaque with the accompanying medal is awarded to the boy or girl whose contest entry came in third. All contestants receive certificates; these are presented to parents, who turn them over to their son or daughter.

With parents in attendance at this banquet, and district court judges, the police judge, the county attorney, city council members, members of the county board of supervisors and officials from the state department of public safety in Des Moines among the guests, this safety contest becomes an important and thrilling event for the winners.

Especially is it thrilling if one school has won the award three times—for then the plaque is presented to them to keep. Otherwise, the name of the school is engraved on the award, with the name of the student who won it, and it is kept in an honored place until the following year, when it is re-presented to the school and students which win it that year.

Entrants to the contest are chosen each year by the principals of Dubuque's 21 high schools, each of whom is asked to select one outstanding student from his school. The student, in turn, is asked to agree to:

- ▶ attend, as a guest of the Dubuque Safety Council, the November business meeting of the Council,
- ▶ be prepared to write some sort of manuscript on safety,
- ▶ attend a dinner at the Chamber of Commerce and bring his parents,
- ▶ afterwards, report to a school assembly his experiences of the day and serve as liaison officer between the Council and his or her high school.

The last requirement is very important, as



Russell Brown, second from left, presents Ruth Ann Schneider, Holy Cross high school senior, with her plaque as first prize winner in the 1955 Dubuque high school safety contest. Other winners were Edward Deckert (left, Washington junior high ninth grader . . . second place) and William Kelley (Dubuque senior high senior, on right . . . third place). Photo, courtesy Dubuque Telegraph Herald.

the student, after entering the contest, automatically becomes the representative of his school to the Safety Council and of the Safety Council to his school. An alternate entrant is also named, so that the school is represented even if the initial entrant becomes ill.

Dubuque's contest was begun in 1951 as a regular safety essay contest. It had a surprise element, however, even then, as the students, although they knew they would have to write an essay on safety, did not know exactly what subject they would be asked to write on until after the luncheon. Topics were chosen by lot from a list of 30 subjects.

When it became apparent that if the contest continued as an essay affair, pupils could anticipate or guess the general theme, the *real* surprise method was used.

In 1952, contestants drew numbers which entitled them to select one picture from a group of 40 photos of wrecks, hazards, etc., supplied by the National Safety Council. They were to imagine the cause of the wreck, the results and the responsibilities involved, and write their essay in 250 words or less.

In 1953, surprised contests were handed a list of 25 safety topics, told to pick one and prepare a two- or three-minute speech. They could use notes or outlines but could not give their speeches verbatim.

In 1954, pupils were to assume they were contributing an editorial on safety to a local paper or a school paper, an editorial occasioned either by excessive accidents or a period of no accidents.

In past years, contest entrants have been supplied with safety literature beforehand so that they could "bone up" on safety before coming to the luncheon. This year, however, it was felt that such literature would only tip contestants off to the sort of thing they would have to write, so entrants came to the meeting "cold," without official preparation. They were shown a film, "Chain Reaction," starring Bob Hope, which depicted the chain reactions that one driver's bad or good habits will have on others. Then they were told to write a short speech that could be used by them in introducing the film to the persons attending some meeting . . . such as school assembly, PTA gathering, city council meeting, or the like.

Results, as always, were good. Contestants came up with direct, good reasons why any group should watch the film and learn something from it. Contest judge Russell I. Brown, at that time a staff representative of the School and College Division, National Safety Council, and now director of safety education for the Iowa Department of Public Safety, reported that the teen-agers did a "fine job"—it took him the whole afternoon to judge the 21 papers, decide which was best. The effect of the contest, and the award presentation that evening, on both parents and children, was "tremendous," Brown noted, "an extremely important way to bring the parents in on the program."

Yes—an important way, for both parents and teen-agers—a contest with a slightly different slant, this "surprise" contest run by the Dubuque Safety Council.

Buttons, Badges and Clubs



A safety program which permeates the entire school can develop courteous, cooperative attitudes among teen-agers, thus build better and safer citizens.

By May F. Hazard
Safety Sponsor
Copernicus Junior High School
Hamtramck, Michigan

OUR objective at Copernicus Junior High School is to build courteous, cooperative responsible citizens . . . prepared for better living in the home, at school and in the community.

This, you will say, is the objective of every school. But at Copernicus we set about our task in a way you may not, using safety education as the medium. We stress safety in all phases of school life, both curricular and extra-curricular. For we feel that safety education, with its attendant stressing of attitudes of responsibility, courtesy, and alertness, will help to develop the maturity so essential to more productive citizenship.

But a safety program should not only be tailored to help the student mature in attitudes and responsibilities. To be valuable at all, it must also be planned to meet the needs of the particular community.

Hamtramck has very definite safety needs.

First, it is an industrial center. Second, it is an "island city," completely surrounded by two other communities. These two factors increase our daily flow of traffic tremendously. Naturally, hazards increase in direct proportion to the amount of vehicular traffic.

To meet these dangers, Copernicus has developed a three-fold program: a curriculum which incorporates safety education as a vital part, a student safety organization which regulates extra-curricular safety activities, and a "Big Brother and Big Sister" project which helps the entire community.

Safety is unique; it is one of the few subjects that can be taught successfully across the curriculum board. And from time to time at Copernicus every area of the curriculum is involved with some type of safety project.

Early in the fall, the English classes prepare letters to parents asking for their support and cooperation in the safety program for the coming year. The best letter is selected to be processed, sent to all homes. Often the English classes participate in a safety essay contest. Winners then present their speeches to the student body, the audience becomes the judges—TV style—and the winner is selected upon

the amount of applause. This is fun as well as interest-provoking.

The art classes contribute by developing creative safety posters, signs and warnings for bulletin boards throughout the building and corridors. An interesting outcome of one safety poster contest was the display of all the posters in one of the city's larger department store windows. This is just one way of reaching out into the community with messages of safety.

The drama classes have staged a safety puppet show, made recordings and prepared TV and radio scripts. Last year the puppet show was an all-out school affair. A teacher wrote the script; the art department made the puppets; the home economics girls dressed them;

At left, "Big Sisters" of Copernicus junior high school show their younger school mates how to cross in safety, passing on the principles which appear (as below) on the back of their club membership cards.

GOOD SAFETY PRACTICES

1. **Stop** at the curb.
2. **Look** both ways.
3. **Wait** until it's safe --- then
4. **Walk** across the street.
5. **Cross streets at cross walk with lights**
6. **Be a courteous pedestrian and driver**
7. **Wear some white at night.**

the woodwork shop built the stage. The music department contributed by writing an original safety song to the tune of a current hit. Safety was really in the air!

Safety slogan contests are held at least once a year. The best have been printed and the safety patrols at different times have distributed over 500 of them to the stores where they are displayed. Thousands of citizens reading the slogans have been reminded to use caution, all because of a group of safety-minded teen-agers.

Statistics can be boring and dull, but not so when the social science and math classes break down a local police report to find out the who, why, what and where about accidents and when they occurred. From the findings, lively panel discussions follow. Bulletins and "danger spot" maps are also developed and sent home for the family to use.

NEED HELP?

Want ideas to put to work in your school, with your teen-age student safety council? Write the School and College Division, National Safety Council, 425 North Michigan Avenue, Chicago. Ask for: "Make Safety Their Responsibility, Too" . . . numbers 1 through 5.

This series of articles, appearing originally in this magazine last year, has been reprinted to give you information on how to set up a school safety organization, keep it clicking.

Early in September of every year, a student organization is formed known as the Copernicus "Safety Commission." The group, made up of 14 members, with equal representation from the various grades, meets weekly to discuss safety problems and to plan and direct all safety activities in the building.

Students on the commission know those activities which appeal most to the teen-ager; because of this, safety has been brought into the most popular teen-age events.

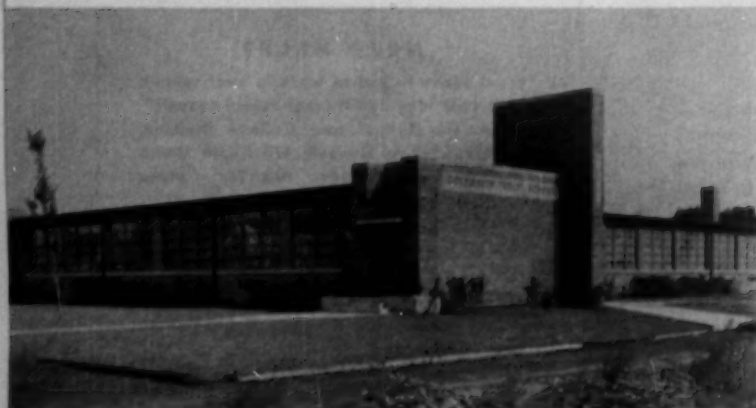
One of our important activities is a club known as the "Big Brother and Sister Safety Club." Each member pledges to be responsible to teach a younger child good safety practices for one year. (There is the assumption that if the youth teaches safety he is more likely to practice it.) A very attractive printed card bearing the student's name (billfold size) is given to each member. This card is the ticket of admission to noon-day dances, movies, and other entertainments.

Buttons, badges and clubs! Every teen-ager loves them. And the Copernicus safety program helps satisfy these needs by supplying a worthwhile motive—that of saving lives.

Only a few of the many group experiences have been outlined. There will be more, for once students accept a work as worth-while and interesting they work tirelessly to produce results.

Results of the program at Copernicus?

The rate of accidents has decreased in the school age group in the past years, according to police statistics. Could it be that through participating in the safety program, youngsters have learned to be more courteous, more respectful, and more understanding of each other's rights? When youngsters are armed with these desirable attitudes, safer living is inevitable.



a statement of principles on
responsibility for
the provision of . . .



This statement of principles was prepared by the School Plant Planning Committee of the National Safety Council and has been endorsed in principle by the Association of School Business Officials and the National Council on Schoolhouse Construction. It is presented here for your consideration . . . and for the guidance of all school administrators and boards of education as they face and meet the constantly growing problem of providing sufficient, safe school space and equipment for the youth of our nation.

By Thomas J. Higgins
Director
School Pkg. and Facilities Survey
Chicago Ill., Board of Education
and Chairman
School Plant Planning Comm., NSC

A Safe School

ANY society requiring that children and youth of specified ages attend school is morally, if not legally, responsible for the provision of school plants that are safe, healthful and of the type that will make the maximum contribution to the total educational program.

More specifically the provision of a safe school environment is an inherent demand upon those charged—by custom, regulation or law—with responsibility for the location, planning, construction, equipment and operation of school plants.

Primary responsibility for the provision of safety in school plants is vested in boards of education and those boards should instruct their operational forces to make necessary provisions for safety.



All photos these pages courtesy Board of Education, Chicago, Ill.



School Environment

The states have a stake in the provision of a safe school environment and the degree of acceptance of their responsibility is shown by the many regulatory school plant services now being rendered by educational authorities.

If educational authorities are to discharge their recognized responsibilities for the provision of a safe school environment, the funds necessary for professional and technical personnel must be provided.

By statute and/or custom educational authorities share responsibility for the provision of safe school plants with other officials and/or departments.

In discharging their responsibilities for the provision of safe school plants, educational authorities and cooperating agencies should do so in accordance with existing applicable codes

and regulations.

While operating within the established framework of existing statutes, codes and regulations, responsible educational leaders constantly will evaluate the requirements they must meet and will propose desirable changes to those individuals and groups authorized to make such changes.

Everyone concerned with the provision of a safe school environment recognizes that no matter how skillful the professional individual or group who visualized the plant, no matter how generous the public support that brought the plant into being, the over-all goal of safety in a school plant can be reached only through the cooperation of the faculty, students, custodial staff and others who live in the building day-by-day or visit it only occasionally.



Extra!

... Extra!

Safety can prove extra important to elementary or high school students when they not only "read all about it" ... but write all about it themselves in a special safety edition of the school newspaper. This is the way it happened in Utah last year ... and the way it will work out in New Mexico this month.

By Curn C. Harvey
Sponsor, School Newspaper
Grants Grade School
Grants, New Mexico

ANYONE who has tried to teach the principles of safe living to young people will probably agree: if we can get these youngsters to work for their own safety, it will prove much more effective than would a great deal of preaching by adults.

The high school ... and even the elementary school ... paper can be a vital force behind such a program.

My experience for the past several years has been with 6th grade ... upper elementary ... students. What they have accomplished in the way of special safety editions of the school newspaper any other elementary school group might do as well ... and high school students

should be able to do much better.

Last year at Milford, Utah, the January special edition of the *Milford Siren* was high point of an intensive and integrated school safety program initiated in September. This year, as sponsor of the school newspaper at Grants School, Grants, New Mexico, I have instituted a similar program ... and the special safety edition of our school paper will be off the presses this month.

How did this come about? Not entirely of itself. For all good projects by and for young people require stimulation. But once stimulated, the pre-teen and teen-age youngsters can and will carry on the projects themselves ... adding some embellishments which may not have occurred to the sponsor.

At Milford, at the beginning of the 1954-55 school term, a group of sixth graders who were members of the school safety patrol and who were also interested in working on the school paper sat down with myself (I was sponsor of both activities) and with the school principal. Together they planned to do something to cut down on the number of accidents in our school community. They wanted to make fellow students safety conscious ... and they wanted to extend their message to high school students as well ... and to all citizens of the community.

First step was to enlist the aid of Mayor Raymond L. Kizer and S. A. Williams, editor of the *Milford News*. From Williams they learned that a good paper doesn't only report the activities of local citizens, it molds and leads public opinion and action. First result: two assemblies and a PTA program featuring safety.

Second step was to give all students in the school something to do safety-wise. This involved enlisting the aid of teachers. And before long every class was studying one or more phases of safety. The sixth grade developed special units on safety. All classes spent some home room time each week on the subject. Soon, in order to make this study time more interesting, both teachers and pupils began to gather safety material from every source ... from the National Safety Council, the American Automobile Association, the Utah highway department, the NEA, university extension divisions and many other sources. Before long students were developing material on their own: a map of the community showed traffic hazards which students should avoid on their way to and from school.

By January there was plenty of safety activity

in the school to report on and a special safety edition of the *Milford Siren* was a natural. Into the issue went reports of what had happened in each room of the school to focus attention on careful living. Also reported were accident statistics for the state and the nation. And following the pattern of big-town newspapers, the *Siren's* staff had written in advance to well-known persons in the national safety movement, asking for statements which would bring home to fellow students the importance of taking care at all times.

One feature of the special safety edition was a report of the survey made in the school to discover exactly what was being done to teach boys and girls in all grades safety habits. Activities brought to light in the survey were of two kinds: all-school projects unified under the direction of the administration in which all groups participated, and activities, projects or units of study carried on by individual classes or grades.

Among other interesting facts the survey revealed that:

- ▶ There was integration of safety teaching throughout the school with such subjects as art, social studies, science and English . . .

- ▶ Every grade had developed safety instruction and activities suitable for the age level of its pupils (it was obvious that boys and girls are never too young to learn about safety) . . .

- ▶ Discussions help more in learning about safety beginning with the third and fourth grade . . .

- ▶ The higher the grade the more closely safety can be correlated with other subjects . . . for fifth and sixth grade students seem more safety conscious than their younger brothers and sisters (though they also seem more prone to accidents).

Did the student effort attract the attention of townspeople? It did. The special safety edition of the *Milford Siren* came out in January. In February a special edition of the paper featured good citizenship. For the two special editions the Utah legislature later passed a resolution congratulating and commending the school and its pupils on their initiative, resourcefulness and worthy achievements. The scroll of the resolution is a prized possession of the school; each sixth grader who participated in the patrol or was on the *Siren* staff also prizes a merit pin and certificate of recognition awarded him at the end of the year by the Mayor of Milford in the name of the town council.

Views AND REVIEWS

• • • SAFETY TEACHING AIDS

SAFETY FILMS

Child Safety

Do You Know About Burns? (35mm silent slidefilm) black & white. 27 frames. Produced in 1955.

This filmstrip shows elementary school children that although home can be a very safe place, careless people can make it very dangerous. Fire hazards, especially, are a great danger to children and adults. A visit with the "Smart" family shows each member of the family engaged in an activity that could cause a fire or burn someone if great care is not taken. Some of the potential hazards shown are the stove, burning leaves, ironing, wood-burning tools, cleaning fluids, etc. Precautions to be taken, plus first aid for burns make up the story of the filmstrip.

Prints may be purchased from Visual Education Consultants, Inc., 2066 Helena St., Madison 4, Wisconsin. The price includes a Teacher's Manual.

Primary Safety: In the School Building (16mm sound motion) black & white or color. 11 minutes. Produced in 1955.

A Coronet Instructional film telling about a safety game that teaches children how to be safe in the school building. When it's one child's turn to be the Safety Guide in his classroom, he uses a STOP sign to call attention to dangerous actions and a GO sign for safe practices.

Another Coronet film is *Primary Safety: On the School Playground*. Also a 16mm sound motion picture (in black & white or color, running 11 minutes), it shows the right way to swing, to play on traveling rings, to see-saw, play ball, and to slide. The children demonstrate good safety practices that apply wherever children play.

Both films are available for purchase and rental from Coronet Instructional Films, 65 E. South Water St., Chicago, Illinois.

For further information on these films, contact the source given immediately after the description. Nancy Lou Blitsen, Film Consultant, National Safety Council, can send information on other available safety films. Single free copies of the December quarterly Supplement to the *National Directory of Safety Films* are also now available. For information on new books see page 39.

a pilot course conducted at Iowa State Driving
Research Laboratory last summer indicates that
if you start to change driver attitudes before
the legal driving age you may be able to

Reduce The Cost Of Driver Education



They may be too young to drive a car, but not too young to be interested in what makes it run. At right: An Auto Trainer with instruction board helps them learn to shift.

By A. R. Lauer
*Professor of Psychology
Director, Driving Laboratory
Industrial Science Research Institute
Iowa State College*

And Milbert H. Krohn

FOR five years the Driving Research Laboratory at Iowa State College, through a grant from the Allstate Insurance Company, has been investigating the effects of driver education on various groups and the possibilities of reducing the cost of teaching. Results may be summarized under three headings:

▶ Driver education has different effects on boys and girls, as is indicated by their accidents reported to state motor vehicle departments.

▶ Some instructors do a much better job than others.

▶ Attitude shifts are obtained in the desirable direction.

One of the questions arising from our experimental studies is why teaching benefits women drivers more than men drivers, particularly at the earlier age. Our observations would indicate that it is more difficult to secure desirable results after a student has his driver's license . . . and girls usually get their training before they obtain a driver's license while high schools frequently train boys with a license.

In addition, boys have a tendency to work with cars and to learn a great many things, correctly or incorrectly, before they take the driver training course.

It therefore seems reasonable to conclude that in the case of men, instruction is not pitched at the proper level. One solution would be to move the training down into an earlier age bracket. This brings up the question as to whether training persons below the legal age to drive will not encourage them to drive illegally.

With these considerations in mind, during the summer of 1955 we set up a pilot study at Iowa State, to determine what effect pre-driver education would have and at what ages



pre-driver education might be given most successfully.

The experiment was conducted by Milbert Krohn, under the direction of A. R. Lauer, and with the assistance of graduate students John M. Anderson and James F. Cuddy.

It was assumed that elementary and junior high school youngsters would not be able to drive an automobile; the course as set up could be used as a unit in any course of the curriculum of the late elementary or junior high school. It could be given in science, social science, health and safety, physical education or any other phase of the curriculum. The results indicate the course may offer possibilities for extending driver education to a much broader

base than is possible under the present system of training.

A four-week course was offered. Of the 17 persons enrolled, 14 were boys and three were girls. Their ages ranged from 10 to 14 years. They were youngsters from all walks of life; the fathers of some had business and professional backgrounds while the fathers of others were laboring men. There were cars in all the families. They were typically well-behaved youngsters at all times . . . and interested, as is indicated by the fact that they would show up half an hour before time and would linger after the meeting until told to leave. In addition, they volunteered with such fervor that there were always several members of the class to take any particular role assigned. They asked questions avidly and carried on a marvelous interchange of ideas when the class was thrown open to discussion.

Classes met for one hour periods. There were six class meetings and six laboratory periods. Two periods were used for evaluation. (It would seem on the basis of this experiment that 10 to 12 lesson periods is about right for a unit.) The laboratory periods were one hour long and four to six students were taught in each section, using two AAA Auto Trainers with instruction boards. (It would be better to have one for each of the members of the section.)

The youngsters did not drive automobiles at any time. The two Auto Trainers were utilized for laboratory training. The students were intrigued by the apparatus; at no time was it apparent that they would rather work on an automobile. They seemed so interested in conquering the manipulation of the trainer that the idea of it not being a real car seemed never to enter their minds. Preliminary arrangements were made with the parents regarding the conduct of the course and assurances were given that the under-age students would not be permitted to handle actual cars.

It is quite obvious that it would be illegal to have these youngsters operating cars; all instruction was beamed at illegal operation of a motor vehicle at any time in such a way as to discourage it.

All types of visual aids appealed to the youngsters. They especially liked the magnetic traffic board commonly used in driver education classes, where signs and small toy automobiles attached to the board by magnets are moved around to create problem situations and draw responses on matters of traffic rules and

safety. The many fine pamphlets showing cartoons and schematic representations of good driving practices were also most popular with the students.

Quite often it was found useful to play a role or to dramatize in demonstrating traffic situations. One student took the role of a driver and problem situations were set up to draw response from the other students. Recitation, discussion and other classroom techniques were used. We also used one of the leading texts in the field of driver education, though it was somewhat difficult for the students to comprehend. Consequently, only selected sections of a few pages and reference to pictures was made. There should be work done to provide materials for youngsters of this age.

Generally the students thought they knew more than they actually did . . . and like all teen-agers they were quite certain of their beliefs. Accurate information regarding right-of-way, rules of the road, as well as safe driving practices, was quite generally lacking at the outset. The students did not seem to have developed the attitudes they needed to be concerned with such things at this age. We felt that as a result of the course many of them acquired a new interest in becoming acquainted with these aspects of driving safely.

From time to time written assignments were

made and the pupils were given tests during certain laboratory periods. The students were very serious about their work and seemed concerned about the outcome. This is somewhat out of the ordinary, considering that the class came in the middle of the youngsters' summer vacation and there were probably many other activities competing for their interest. Everyone was required to do a certain amount of home work.

Do we believe, on the basis of this study, that pre-driver education has possibilities? We do. Unless the pilot group was very atypical, more can be done at this age than can be accomplished in much more time later on in high school, after attitudes are more definitely formed. This course also has the advantage of reaching a much larger school population and particularly those who may not finish high school. The cost of instruction compares with standard school subjects at this level.

The immediate objective of this study at the Iowa State Driving Research Laboratory was to establish whether or not driver education before legal driving age was feasible. A very strong affirmative answer is in order. The course offers an entirely new view on driver education; it seems to have possibilities for economy of training as well as effectiveness in the over-all driver education program.

Kindergarten Safety Lesson for This Month

February, 1956

Community Safety Helpers

Language	Work Period	Vocabulary	Rhythms
1. Duties of each helper	1. Draw and paint pictures of their helpers.	Fireman	1. Policeman on horse back, walking, motorcycle.
2. Type of uniform	2. Make a traffic light.	Policeman	2. Direct traffic.
a. Fireman	3. Make paper hats.	Traffic signal—semaphore	3. Fireman going to fire, put it out, and return.
b. Policeman	4. Make badges.	Billy club	
		Station—Kinds:	
		a. police	
		b. fire	
Literature	Miscellaneous	Music	
How Officer Pat Saves the Day—Dr. Suess	1. Arrange to have a representative from these departments come and tell the children about their uniform and their duties.	1. Remember Your Name and Address—I. Caesar	
And to Think That I Saw It on Mulberry Street—Dr. Suess		2. I'm a Policeman Big & Strong—Coleman & Thorn	
Five Little Firemen—Golden Books	2. Tell ways in which the children can help each of these community helpers.		
Make Way for Ducklings—McCloskey			

Written by Juanita Bergum, kindergarten teacher on leave from the Detroit Board of Education, Detroit, Michigan.

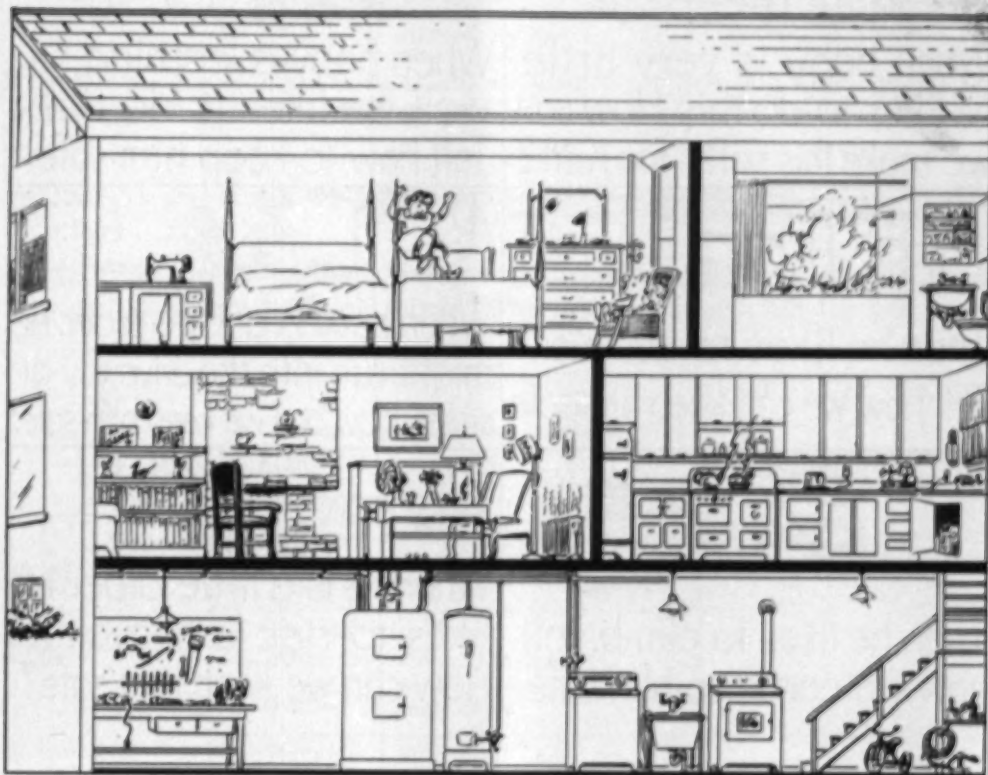
Lower Elementary

safety lesson

Sometimes children play at home with things that are not safe for them to play with. Mark with an X the things that are all right for you to play with. Tell why it is safe for you to play with them. Tell why the things you have not marked are unsafe for children your age.



Sketch S-6510-A



Things To Do

1. Make a picture like this of rooms in your home. Mark with an X the things that are safe for you to play with.
2. Cut out pictures of things we have in our homes. Make a booklet, putting one picture on a page. Write a safety rule under the picture.
3. Make charts on which to paste a collection of pictures, under a label such as, "Do Not Touch," "Put Away," "Pick Up."



Prepared by Leslie R. Silvernole, Associate Professor, Continuing Education, Michigan State University, East Lansing, Michigan, and Roland Silvernole, elementary school teacher. Published by School and College Division, National Safety Council, 425 N. Michigan Avenue, Chicago 11, Illinois. One to 9 copies of this unit, 6 cents each. Lower prices for larger quantities. Printed in the U.S.A.

Help Take Care of Baby

To keep baby safe, we must watch over him at all times. The pictures show some dangers. Do you know other dangers for baby?



When baby is very little he likes to do this. How can we make this safer for him?



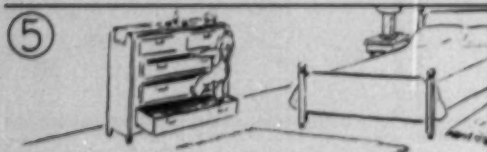
When baby is learning to walk he likes to do this. Tell how to keep him safe.



Then he likes to do this. Tell how we can keep him safe.



When baby is a little older, he might run into the driveway or street. How can we keep him safe?



Then he likes to climb. Tell how we can keep him safe.



When he is a little older he likes to ride a tricycle. How can we keep him safe?

Teacher: Elicit the following rules and others to fit other situations.

1. Baby should never be left alone where he can fall or roll off. Keep out of his reach safety pins and other small objects.

2. Keep out of baby's reach sharp, hot, or heavy things that might hurt him.

3. Be careful to keep in low cupboards only things safe for baby to play with.

4. When outdoors, the toddler should be inside playpen or fence, or watched by older child or grownups.

5. Arrange furnishings so that baby is not tempted to climb in dangerous places. Have hooks on window screens and close drawers.

6. Older child or adult must be watching when young child is outdoors on tricycle.

Hazards change as baby grows from infant, to toddler, to run-about. Be alert to them.

FEBRUARY 1956

Upper Elementary



safety lesson

Is It Safe?



Sketch S-0570-A

There are some things which you might do safely which would not be safe for your small brothers or sisters to do.

There are some things which might be unsafe for you but which might be safe for your parents and other adults.

Some other things are not safe for anyone.

Still others are things we can all do for our own safety and for the safety of others.

In the chart below, mark S (safe) or U (unsafe) in the squares to show who can or cannot do these things. The first one is marked for you.



	A Small Child	Yourself	An Adult
1. Using a step ladder to reach high places.	U	S	S
2. Putting on the light before going upstairs at night.			
3. Using a rubber mat in the bathtub.			
4. Playing with beads, marbles, and other very small things.			
5. Petting strange dogs.			
6. Running a light cord under the rug.			
7. Connecting an electric appliance with wet hands.			
8. Standing on a wet floor while turning on a light switch.			
9. Disconnecting a floor lamp by pulling on the cord.			
10. Using a frayed electric cord.			



Prepared by Leslie R. Silvernale, Associate Professor, Continuing Education, Michigan State University, East Lansing, Michigan, and Roland Silvernale, elementary school teacher. Published by School and College Division, National Safety Council, 425 N. Michigan Avenue, Chicago 11, Illinois. One to 9 copies of this unit, 6 cents each. Lower prices for larger quantities. Printed in the U.S.A.



	A Small Child	Yourself	An Adult
11. Picking up small pieces of broken glass by hand.	U	S	S
12. Washing sharp knives.			
13. Chopping wood with an axe.			
14. Leaving a rake on the ground with the points up.			
15. Tapping a nail lightly with a hammer while holding it.			
16. Starting a fire with kerosene.			
17. Handling a gun.			
18. Lifting heavy pieces of furniture alone.			
19. Using a washing machine wringer.			
20. Using a power mower.			
21. Peeling potatoes with a sharp knife.			
22. Carrying a box of matches in one's pocket.			
23. Leaning back on two legs of a chair.			
24. Keeping old left-over medicine in the cabinet.			
25. Lighting the oven of a gas stove.			

Some Things To Do

1. Have members of the class draw up safety rules for each room in the house. Make posters illustrating these rules. Present a home safety program to another class using these posters.
2. Have members of the class report on home accidents which they know about and tell how they might have been avoided.
3. Ask children who have baby brothers or sisters to tell of the special home dangers for babies and of the special precautions that should be taken.
4. Dramatize safe and unsafe ways of taking care of a small child.

Key: 1. U.S.S. 2. S.S.S. 3. S.S.S. 4. U.S.S. 5. U.S.S. 6. U.S.S. 7. U.S.S. 8. U.S.S. 9. U.S.S. 10. U.S.S. 11. U.S.S. 12. U.S.S. 13. U.S.S. 14. U.S.S. 15. U.S.S. 16. U.S.S. 17. U.S.S. 18. U.S.S. 19. U.S.S. 20. U.S.S. 21. U.S.S. 22. U.S.S. 23. U.S.S. 24. U.S.S. 25. U.S.S.

Junior High School

SAFETY LESSON

Railroads and You



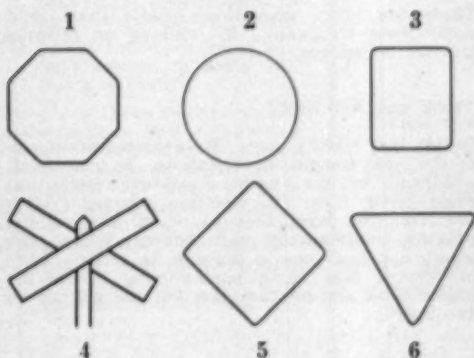
Sketch S-0511-A

Analyze the Poster

Look at the poster picture carefully. Is there any future in trying to beat a locomotive to the crossing? What "loco" motive prompted the driver to do such a foolish thing? Was he trying to get somewhere in a hurry? Was he trying to "show off"? Was he just plain careless? No matter what the reason, instant death or painful injury are usually the results of such action. Perhaps most of you aren't old enough to drive yet, but you soon will be and it's time now to learn about safety rules.

Signs of Life

Are you aware of the various "signs of life" on the road? You should be able to recognize them by their shapes alone—without the writing. See if you can correctly fill in the following signs with the appropriate message.



Answers: (1) Octagonal sign means stop; (2) Round sign means yield right of way to cross traffic; (3) Rectangular sign means R.R. crossing, look and listen; (4) X-shaped sign means R.R. crossing, stop; (5) Diamond sign means caution—slow down; (6) Inverted triangle sign means yield right of way to cross traffic.

The Railroad Picture

While you may not be driving a car as yet, you may still do certain things which will endanger the lives of hundreds of train passengers—as well as your own. For example, you may be guilty of trespassing on railroad property. What does this mean? In order to fully understand what "trespassing" on railroad property means, let's look at the whole picture.

In 1952 there wasn't a single passenger fatality resulting from train accidents. This was an amazing record, considering that passengers traveled about 34 billion miles during that year. The railroad has developed its safety program to such an extent that they can control, to a fine degree, any dangers within the railroad "family." The two main sources of accidents that railroads must worry about are outside of the railroad "family." The main sources are: grade-crossings and trespassing.

The railroad cannot train all the motorists on the road. Despite safety signs, ringing bells, and flashing lights, some motorists still hit trains, and get hit, causing injury and death at the grade crossings. And other people, old and young, are injured because they trespass on R.R. property, where they have no right to be.

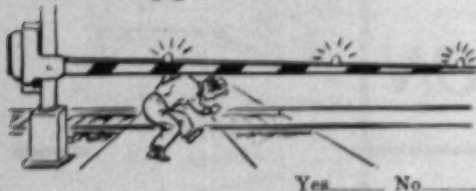
The railroads have a time schedule to keep. All kinds of safety devices are placed along the tracks to warn people to keep off the right of way so the trains may proceed swiftly and safely. Despite this, however, some people ignore all warnings and trespass. It must be remembered that the railroads generally operate on a private right of way. People are asked not to trespass—not because the railroad is selfish, but because the railroad does not want people hurt.



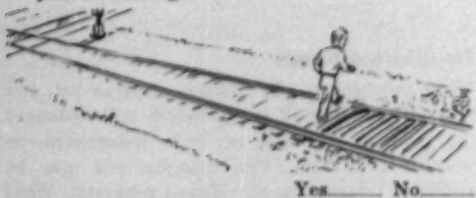
Are You Guilty?

Here are some of the main trespassing violations. Judge yourself—check Yes or No. You are guilty of trespassing if you:

1. Crawl under or pass around the end of lowered crossing gates.



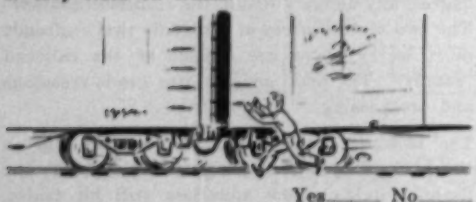
2. Take short cuts across tracks other than at public crossings.



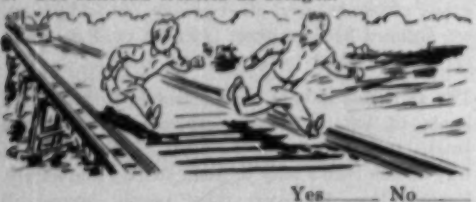
3. Walk on railroad tracks.



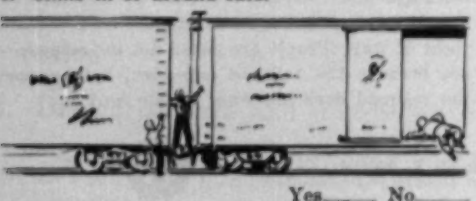
4. Hop rides on trains.



5. Use railroad trestles as bridges.



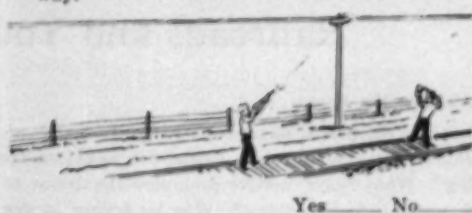
6. Climb in or around cars.



7. Tamper with railroad property, such as signals or switches.



8. Damage insulators or signal lights along the way.



Results of Trespassing

What are some of the possible results of trespassing? For example, number 5, walking on trestles, can result in any of the following:

(a) You may step through the open ties and either break a leg or twist an ankle. Or you may just catch your leg and be unable to free it before a train comes.

(b) You may slip and fall from the trestle—with no train coming—and be injured.

(c) Since most trestles and bridges are built with very little room except for the train, you may be caught in the middle by an approaching train and have to jump for your life. Jumping on rocks or into water may cause a lifetime injury or death.

There are other disastrous results that could occur from trespassing by walking on railroad trestles or bridges.

Think and Act Right

Divide into eight groups. Each group select one of the main trespassing violations. In your small groups discuss the possible disastrous results that could occur from the violation selected. After you feel you have thought of all the results, practice pantomiming each action. When each group has had time to develop its actions, have all groups take turns pantomiming before the entire class and let the class list the actions on the board.

Suggested Projects

1. Develop posters on each of the violations with a list of the possible results under each poster.
2. Ask your local railroad station manager to come to class and tell you some of his experiences.
3. Ask the chief of police to have a policeman come to answer any questions you may have.



Senior High School

SAFETY LESSON

Railroads and You



Sketch S-0511-A

Because of an organized safety program which has been in existence for over 30 years, railroads provide one of the safest means of transportation. Accidents for which the railroads may be considered actually responsible are rare. The main safety problems that the railroad must contend with are: (1) grade-crossing accidents, and (2) trespasser accidents. Let's take a look at the first problem—grade-crossing accidents.

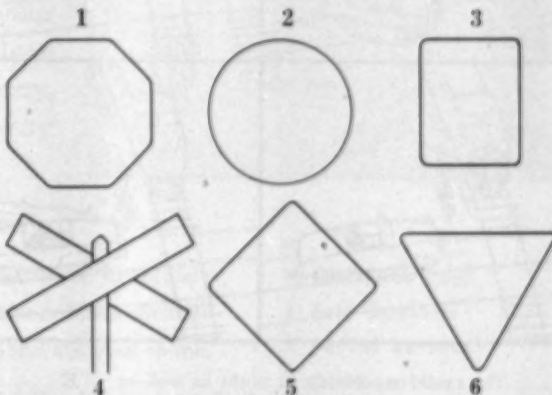
In considering the grade-crossing problem, it must be remembered that:

- (1) Trains have a schedule to keep. Every minute counts!
- (2) Trains have the right of way at crossings and cannot stop at each crossing to see if motorists are coming.
- (3) Trains travel on tracks and can't swerve to avoid hitting a motorist.

The above three statements describe policies and practices which are designed for the safety and convenience of hundreds of passengers. The safety of hundreds of people cannot be jeopardized by a few people who care nothing about the schedule or right of way of the trains.

Signs of Life

There are many safety signs to help motorists know when they are approaching a grade crossing or other areas where extreme caution should be exercised. Listed below are the "Signs of Life." See if you can correctly label them:



Check the Poster of the Month

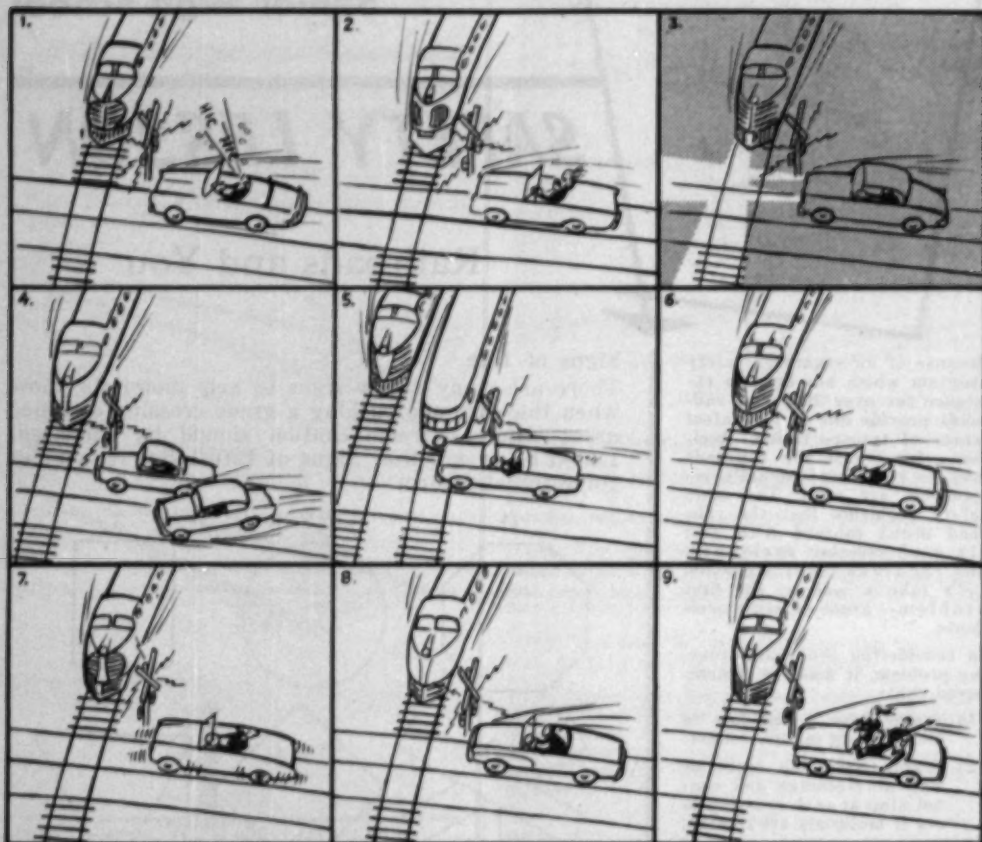
The driver of the car in the poster did not pay any attention to the warning signs when approaching the grade crossing—or was prompted by a "loco" motive to beat the train to the crossing. In either case, his sense of values was not sound. The first rule for any driver is to play it safe. It doesn't require any skill or intelligence to press the accelerator to the floorboards and listen to your passengers scream. It does require good sense, alertness, and consideration to obey the "Signs of Life" and to use good judgment when driving a car. Ordinarily, no one would ever think of running an automobile into a train. Also, people usually think of a grade crossing accident as one where the train hits the car. The fact is, however, that cars hit trains in the majority of such accidents and they do so because the driver has failed to observe proper driving practices and heed warning and control devices.

Answers: (1) Octagonal sign means stop; (2) round sign means R.R. crossing; (3) rectangular sign means traffic signals; (4) cross bars mean information and information; (5) diamond sign means caution; (6) inverted triangle sign means yield right of way to cross traffic.

Prepared by Dr. Vincent McGuire, Associate Professor, College of Education, University of Florida. Published by School and College Division, National Safety Council, 425 N. Michigan Avenue, Chicago 11, Illinois. One to 9 copies of this unit, 6 cents each. Lower prices for larger quantities. Printed in the U.S.A.

The Nine Most Common Grade Crossing Accidents

According to the Association of American railroads, the most common grade-crossing accidents are shown below. Match the description with the picture by placing the correct picture number in the blank by the correct description.



- A. _____ The motorist, driving at night as well as in a strange location, drives at a speed too great and misjudges his distance.
- B. _____ The motorist has too much alcohol in his system and is incapable of knowing what to do, despite warning devices.
- C. _____ The motorist drives a car with faulty brakes or other defects and is unable to stop or start at the proper time or stalls his car.
- D. _____ The motorist waits for one train to clear crossing then starts up without waiting to check second track.

- E. _____ The motorist sees other cars waiting by crossing, but drives around them.
- F. _____ The motorist is so familiar with the crossing, having passed over it a hundred times, that he uses no caution whatsoever.
- G. _____ The motorist uses only one hand on steering wheel and pays attention to his girl rather than the crossing.
- H. _____ The motorist sees and hears warning but feels he can beat the train.
- I. _____ The driver is distracted by conversation and horseplay of his companions.

Trespassing

Here are some of the main violations of railroad trespassers. Are you guilty?

1. Walking along railroad tracks.
2. Stealing rides on freight trains.
3. Walking on trestles or railroad bridges.
4. Playing in railroad yards.
5. Hitching on slow moving trains.

6. Tampering with switches or safety devices.

7. Throwing material on the railroad right of way.

Remember—you're guilty of trespassing if you are on railroad property.

Remember—The Signs of Life are for your own protection as well as for that of hundreds of others. Obey them!

Answers: A. 3; B. 1; C. 7; D. 2; E. 4; F. 6; G. 5; H. 8; I. 9.

SAFETY AT SCHOOL

With the approach of winter, there is also the approach of more hazardous conditions related to the children who will be going to school. There will be those dark days when visibility is poor. This will be the time when it will be important for you to have a properly outfitted School Safety Patrol. Make your selection from the complete stock carried by our company. Here are some of the many items:



All rubber raincoats, made of 100% rubber. Absolutely waterproof, available in yellow, white or black. School city, or sponsor's name on back. Good the year round.

Metal patrol badge that will lend official importance to the people on the school safety patrol. Officer's badges finished in gold color, members' in nickel. All complete with pin clasp.

Snappy eight point style gabardine caps may be had in Navy Blue, other colors on special order.

- Overseas caps
- Felt Emblems
- Patrol Buttons
- Caution Flags
- Rainwear
- Armbands
- Patrol Belts
- Rubber Footwear and the
- "Corporal Digby" Safety Sentinel

WRITE FOR OUR NEW ILLUSTRATED CATALOG

GRAUBARD'S

"America's Largest Safety Patrol Outfitters"

266 Mulberry St. Newark 5, N. J.

BULL



The picture above represents 90 years of safe school bus transportation in Floodwood, Minnesota. Each of the drivers pictured drives for the Floodwood high school; each recently received a National Safety Council Award.

Left to right: Robert Chambers, John Pirila, Arthur Peterson, Andrew Swanson, Henry Loberg, Henry Moore, George Sudeith, and Norman Larson. Awards to Loberg, Sudeith, and Moore counted as their 14th apiece; Peterson's was his 12th; Swanson, Larson, and Chambers received sixth, fifth, and first awards, respectively. Pirila's award was his first received while driving for the school but his 24th in all . . . the last 23 having been received for his safe driving over the same bus route as a county employee.

Los Angeles Safety Program Adds Eight New Positions

EIGHT new positions, an extensive boost to the pupil-employee safety program in the Los Angeles City schools, have been added to the 1955-56 budget of the Los Angeles City Board of Education. The positions are as follows: one coordinator to head the employee safety program; three coordinators to be assigned to the pupil-employee safety program; two safety engineers; one senior clerk-stenographer and one senior clerk.

The additions came as a result of a 1948 study which indicated that there would be a rapid rise in the frequency and severity of pupil and employee accidents and a subsequent increase in the compensation and insurance costs unless immediate steps were taken to establish an intensive safety program. Those findings were confirmed in a 1952-53 study which revealed an increase of over 45 per cent in the gross annual compensation insurance premiums during this period. Added to the increased cost in premiums is the increase in the indirect cost of on-the-job accidents, which, for substitutes alone, approximates the salaries of 26 full-time employees for one year.

Cecil G. Zaun, safety supervisor for Los Angeles schools, directs the expanded program for both pupil and employee safety.

thankful students organize . . .

A project of some Loras College, Dubuque, Iowa, students in the days preceding the Christmas vacation was called "one of the most encouraging activities that has happened in the safety field in a long time," by Paul Jones, director of public information for the National Safety Council.

The five students were involved in an accident just before the Thanksgiving holiday, when a car they were riding in rolled over on the highway. Upon their return to school after Thanksgiving, they organized a campaign to make every Loras College student safety-minded over the Christmas vacation.

They arranged a display of car wreckage at the entrance to the College, displayed suitable placards at that spot and set up a table at which they asked all students to sign a safe driving pledge. Their frightening, near-tragic accident experience made their urging even more effective.

DE supports S-D . . .

A plea to driver education teachers to support S-D Day, and to stimulate year-around public support for proven year-around programs of traffic safety, was made recently by Rear Admiral H. B. Miller, director of the President's Committee for Traffic Safety, sponsor of the annual safe driving day observance.

With his plea, Rear Admiral Miller released a book on *S-D Day Facts*, containing a statement of the automobile accident problem in the U. S., facts and suggestions on how to promote S-D Day, how public officials and community groups can contribute to traffic safety, publicity possibilities and how to promote support for the Day.

deadly "pencils" . . .

It looks like a pencil, with either a fuse or two wires attached to one end. It is found near stone quarries and in the areas where bridges,

ETINGS "PENCILS", APPLAUSE, EXPERIENCE

roads and skyscrapers are being built. When played with by youthful hands, inexperienced in handling it, it is likely to explode with terrific force, throwing out small pieces of metal as far as 200 feet. Even at that distance, these pieces of metal can cause blindness, but at closer range, fingers and hands can be blown off.

This small, deadly "pencil" is a blasting cap. During 1954, 190 children were injured when they picked up these caps from building sites and started to play with them. For that reason, the Institute of Makers of Explosives has put out a poster and information describing blasting caps and warning children away from them. For more information about this educational material, write the Institute of Makers of Explosives, 250 East 43rd Street, New York 17, N. Y.

NEMA wins award . . .

A George Schuld Memorial Safety Award has been presented to the Household Refrigerator and Freezer Section of the National Electrical Manufacturers Association. The award, presented by the Refrigeration Service Engineers' Society, was made in recognition of the outstanding contribution of this section of the NEMA, through its Discarded Refrigerator-Freezer campaign, toward the national effort to eliminate needless deaths of children in abandoned air-tight cabinets. They have worked in cooperation with the National Safety Council, the National Congress of Parents and Teachers, the Boy Scouts, Girl Scouts and other national service organizations.

Brotherhood Week set . . .

Brotherhood Week, which has not been set aside as the one week of the year to practice brotherhood, but rather as a time of resolution and renewal to sustain brotherhood throughout the year, has been proclaimed for the week of February 19-26.

Theme for Brotherhood Week this year is

During the holiday season hundreds of greeting cards came to me from all over the world. To all of you I extend thanks for your remembrance and the deepest gratitude of the entire staff for your friendship to the Council.

Your helpful efforts for the promotion of safety and the kind words you have expressed so often have been a daily source of inspiration.

My warmest personal greetings and best wishes for 1956.

Ned H. Dearborn

"Brotherhood for peace and freedom—Believe it! Live it! Support it!" The week is a part of the program of the National Conference of Christians and Jews.

Materials for use in the schools, based on the subject of human relations for children in all school grades from primary through college and university level, may be obtained by writing the Commission on Educational Organizations, National Conference of Christians and Jews, 43 West 57th St., New York 19, N. Y.

research committee meets . . .

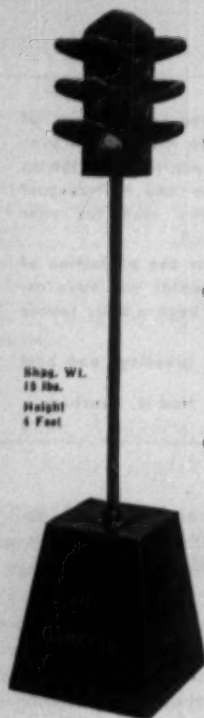
The newly-formed research committee of the School and College Conference, National Safety Council, had its first meeting at the National Safety Congress in October, approved the initial step of sending a preliminary report to colleges and to members of the School and College Conference. The report lists 189 research problems, divided according to areas.

The Council will act as a clearing house on studies of the research problems, some of which will be reported at a research session at the annual Safety Congress in Chicago next October.

Members of the research committee are: Dr. Herbert J. Stack, Center for Safety Education, New York University, chairman; Dr. Wayne

**MAKE SAFETY TEACHING
EASIER with the NEW**

MINIATURE TRAFFIC LIGHT



Shpg. Wt.
15 lbs.
Height
4 Feet

- Duplicates actual stop-and-go lighting cycles.

- Brings safety lessons to life for more effective instruction.

- Has sturdy, yet light-in-weight construction for easy handling and long service life.

MODEL 136A

\$39.00

F.O.B.
Cleveland, Ohio

NOW YOU CAN duplicate true traffic situations right in the classroom! The new Miniature Traffic Light, which is manual in operation, duplicates the actual lighting cycle of real traffic signals. Just 4 feet high, the Miniature Light is ideal for elementary schools, high school and driver training schools. It's all-metal constructed, with shatter-proof plastic lenses. Operates on any 110 volt outlet. No special wiring needed—just plug it in. Comes complete and fully assembled. Place your order NOW!

Full details available on request.
Write the address below.

NEW TEACHING MANUAL for traffic safety instruction. One copy free to qualified personnel. A practical 16-page guidebook on safety teaching. Prepared by a national teaching authority. Write on your official letterhead.

SCHOOL SAFETY LIGHT CORP.

P.O. Box 2873

Cleveland 16, Ohio

Hughes, director of the School and College Division, NSC, secretary; and K. Bookwalter, Leon Brody, Zenas Clark, J. Duke Elkow, A. E. Florio, Charles Hawkins, Harold Jack, Alvah Lauer, Forrest Long, Forrest Noffsinger, Jack Rhodes, Nathaniel Schneider and Russell H. Landis.

S-D Day Skit can be used all year . . .

"Steer Straight Ahead for Safe Driving Day" was the theme of an S-D Day skit published by *Scholastic Magazine* in an issue distributed to schools the week of November 28. The skit, featuring a character named "S.D.," for Safe Driving, as well as other characters, Expert, E. Lectronic Brain, and Boys and Girls, who climb out of a 1956 model car on display in a showroom, explains how safety features on the new cars can help reduce injuries and death, tells some startling automobile accident figures, also why and how accidents are caused.

The skit is informative, clever and can be adapted to any time of the year.

training schools planned . . .

A truck driver training school, as well as a safety school for representatives from transportation, manufacturing and utilities industries in the South have been scheduled by the North Carolina State College Extension Division.

Twelve four-week courses for truck drivers will be given from January through November 26, 1956. The courses include classroom lectures, mastery of basic driving skills, road and city driving. In its seventh year of continuous operation, the school has graduated more than 2,000 drivers for the transportation industry.

The safety school for representatives from industry will be held March 26, 27, and 28 in Winston-Salem, N. C., for discussion of problems of mutual interest.

state safety division formed . . .

Illinois governor William Stratton has appointed George W. Harper of Champaign, Illinois, as superintendent of the new state division of safety inspection and education.

The appointment was effective on January 1. The division, created by the 1955 Illinois legislature, will promote safety practices in commercial and industrial establishments throughout the state.

Mr. Harper has been an associate professor of mechanical engineering at the University of Illinois, Champaign, where he taught industrial safety.



The Instituto Nacional De Seguros of Costa Rica recently sent the above picture to the School and College division, NSC. The display (as indicated by translation of the copy at top and bottom) shows "protection to childhood" in that country.

New Books

Attacking the problem of the health of America's college students, 46 national health and education agencies brought together college presidents, deans, physicians, nurses, psychologists, physical education specialists, recreation, health and safety workers and student counselors last May in the Fourth National Conference on Health in Colleges.

They explored questions on: who is responsible for the health of America's college students; why are thousands of these young people without services essential to the protection and improvement of their health; what health services do college students need, and how can they be supplied?

Some of the answers to these questions may be found in a new book, *College Responsibilities for Student Health*, published December 16. Written by Ethel L. Ginsburg and published for the Conference by the National Tuberculosis Association, the book outlines essential health services of a college, provides a text on what a college health program should be and how it can be achieved.

human variables and accidents . . .

A new book, which attempts to "integrate the results of observation and research on the role of human variables in causing or contributing to motor vehicle accidents," has been published by the Harvard School of Public Health, Boston, Massachusetts. The book, *Human Variables in Motor Vehicle Accidents*, is a review of the literature so far published on the subject.

An extensive work, the book takes up statistical trends in highway accidents, various approaches used in the study of accidents, characteristics of the "host" in causing accidents, and influence of temporary states and conditions which may contribute to accident causes.

traffic bulletin makes bow . . .

A new publication for young drivers made its bow last November. *Design for Living*, is a national traffic safety bulletin published by the Inter-Industry Highway Safety Committee.

Editors of *Design for Living* intend to make it a "medium of exchange—a clearinghouse of information — for persons interested in the young driver traffic safety movement. Reports of what young drivers are doing for traffic safety will be presented . . . to stimulate interest and circulate ideas and suggestions that have been helpful to others."

you and your car

You and Your Car, by the Channing L. Bete Co., Greenfield, Mass., 1954. 15 pp., illustrated. Lively cartoons and instructive drawings characterize this book of driving hints. The book starts out by stressing that a license to drive is one of a person's most precious privileges, enabling him to enjoy the freedom to go made possible by the automobile. It goes on to picture 10 important rules of the road, highway signs and hand signals, instructions on how to pass, park, change a tire, etc.

for SAFETY PATROL EQUIPMENT

Send for new circular of Sam Browne Belts, Arm Bands, Badges, Safety and School Buttons.



We can furnish the Sam Browne Belts in the following grade — adjustable in size.

The "Bull Dog" Brand Best Grade For Long Wear White Webbing 2" wide at \$15.00 Per Doz. \$1.50 each small lots.

3/4" ARM BANDS Celluloid front—metal back. Web strap and buckle attachment.

No. 33 Blue on white JUNIOR SAFETY PATROL.

No. 44 Green on white.

SAFETY COUNCIL PATROL UNIVERSAL SAFETY WITH TITLE PATROLMAN OR CAPTAIN

Per Dozen \$5.00	Lots of 50 25c each
Lots of 25 30c each	Lots of 100 25c each

SIGNAL FLAGS—12x18 inches

Red cotton bunting, white lettering, "SAFETY PATROL."	
Per dozen \$4.00	Less than dozen \$1.00 each

Write for our Safety Patrol Circular
OUR RECORD 54 YEARS

AMERICAN BADGE COMPANY

129 West Hubbard, corner La Salle, Chicago 10, Ill.

TRADE PUBLICATIONS

The following publications are intended for the guidance of those responsible for the purchase of equipment to promote safety in the school. The coupon below will bring FREE to responsible school personnel any or all of those listed.

1. **Asphalt Surfaces:** Bulletin describes and illustrates a new playground surface construction called Rub-A-Mix that provides added safety to children at play. Features emphasized are safety against broken bones, skinned knees; long life, cleanliness, and deadens excessive noise. Berry Asphalt Co.
2. **School Safety Signal:** Bulletin describes and illustrates a portable school safety signal that features two rugged, efficient lights that beam in both direction, alternately, 4" in diameter, with a battery charger built in each unit that operates a full school week without recharging. Sign is porcelain enameled, legal size and shape conforming to state hi-way specifications. New Castle Battery Mfg. Co.
3. **Hot Food and Liquid Carriers:** Application of "Aervoid" stainless steel vacuum-insulated food containers for mass feeding operations, storing and transporting hot food lunches for schools is described in this bulletin. Vacuum Can Co.
4. **Traffic Safety Teaching Manual:** A 16-page guide book on safety teaching prepared by teaching authorities for distribution to qualified instructors of traffic safety. School Safety Light Corp.
5. **School Patrol Equipment:** A complete line of safety patrol equipment is featured in this brochure. Sam Browne belts, arm bands, badges, safety and school buttons, signal flags, etc. American Badge Co.
6. **Driver Training and Testing Equipment:** Catalog illustrates and features driver training and testing equipment. Also presents you with reprints of articles relevant to driving training and testing, including visual aids for safety. Porto-Clinic Instruments, Inc.

SAFETY EDUCATION

FEBRUARY, 1956

425 N. Michigan Ave., Chicago 11, Ill.

Please send me more information on the items circled below:

1 2 3 4 5 6

Name

Title

Address

City

State

Safety Education for February, 1956 • 40

What Are You Doing?

Continued from page 10

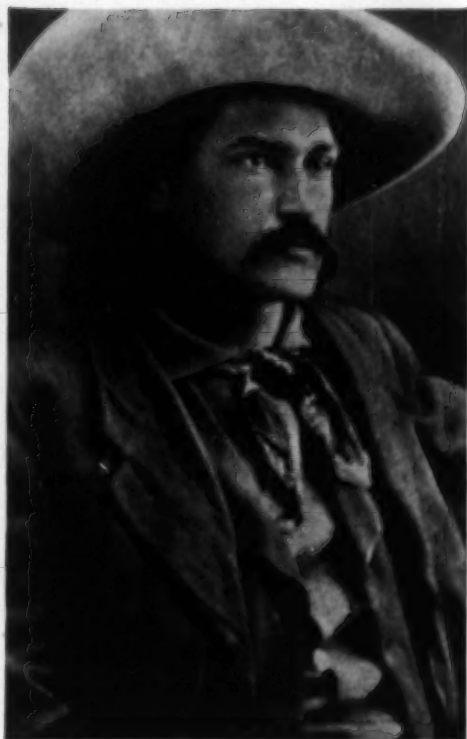
Many accidents which occur to students occur during participation in athletics. In the contact sports, the intercollegiate teams usually have the best of equipment and the best of medical care. Many students, however, are hurt in intramural contests where there is either poor personal protective equipment or no equipment at all.

In the shops and laboratories, where industrial hazards exist, do colleges protect the faculty and their students as well as industry protects its workers, through the use of permanent installations and personal protective equipment? Do the buildings and grounds crews, which do work comparable to industrial construction and maintenance outfits, use hard hats, safety glasses, safety shoes, and the proper gloves, where required in the performance of their duties? Are respirators required where their use is indicated?

We believe that these are but a few of the areas where hazards are neither recognized nor guarded against on most campuses. The biggest value of complete integration of safety into all activities is not only the fact that accidents are prevented, but also, that every student is being educated properly to take his place in the world after graduation.

Any successful college or university safety program must have the whole-hearted, enthusiastic support and participation of top management as the primary requisite. When this attitude is made known, cooperation of faculty members, staff, and students can be secured. Assistance in discovering hazards and in setting up a workable program can be secured without cost by calling upon the local safety council or the local chapter of the American Society of Safety Engineers. The wise administration will act before it is forced to do so by an unfavorable public reaction.

One anticipated objection to the adoption of accident prevention programs is that such programs cost money. Accidents cost the colleges money, whether they realize it or not. Industry has found that accident prevention not only does not cost anything, but that it actually saves money. Moreover, if there is such a thing as an institutional conscience, it should be more evident in educational institutions than in industry.



It's actually easy to save money—when you buy Series E Savings Bonds through the automatic Payroll Savings Plan where you work! You just sign an application at your pay office; after that your saving is done for you. The Bonds you receive will pay you interest at the rate of 3% per year, compounded semiannually, when held to maturity. And after maturity they go on earning 10 years more. Join the Plan today. Or invest in U.S. Savings Bonds regularly where you bank.

Safe as America — U.S. Savings Bonds



The U.S. Government does not pay for this advertisement. It is donated by this publication in cooperation with the Advertising Council and the Magazine Publishers of America.

His calling card had claws on it



LUTHER KELLY lied about his age and got into the army at 15. They sent him West in 1865, and he stayed.

He liked the wilderness. Game abounded. In Trappers' Lake, "trout were so thick they obscured the bottom."

Hostile Indians were also pretty thick. But when two tried ambushing him, he killed both with his Henry .44.

He learned Sioux and sign language, read Shakespeare and Scott.

One day, he visited General Miles, sending a huge fierce-clawed bear's paw to Miles' tent as his calling card. Miles made him chief army scout against the Sioux.

But by 1885, the country was taming down, and Yellowstone Kelly left it.

Two decades later, Teddy Roosevelt praised the heroic treasurer of Surigao in the Philippines who saved the town from outlaws. Name: Luther S. Kelly.

Yellowstone Kelly's body now rests at Kelly Mountain in Montana. But his restless, pioneering spirit lives on in today's America. For it is the trail-blazing courage of 165 million people that makes America great, and that provides the real strength behind one of the world's finest investments: our country's Savings Bonds.

Why not guard your security with this strength? Invest in U.S. Series E Savings Bonds. And hold on to them!



THE 'S OF SAFETY

Here are two aids that will simplify the job of teaching the A B C's of safety—Lesson Units and Safety Education Posters. Tying together a common theme on a timely subject, they create an effective safety teaching program each month, September through May.

LESSON UNITS . . . Here is factual information, suggested student activities, interesting quizzes and tests designed so they can be used as pupil worksheets. Prepared for four grade levels—Lower Elementary (1 to 3), Upper Elementary (4 to 6), Junior High (7 to 9) and Senior High (10 to 12). Lesson Units for Junior and Senior High also include safety projects for correlation with various courses.

QUANTITY PRICES	1 to 9 copies	10 to 99 copies	100 to 999 copies	1000 or more copies
Subscription, 9 issues, ea.	\$.48	\$.16	\$.12	\$.096
Single issues, ea.06	.02	.015	.012

POSTERS . . . While the Lesson Units are used as teaching aids, the colorful, eye-catching Safety education Posters will keep reminding the students of the lesson they learned for the remainder of the month. Two 8½ x 11½", 2-color posters are issued each month, one for elementary schools, the other for secondary schools.

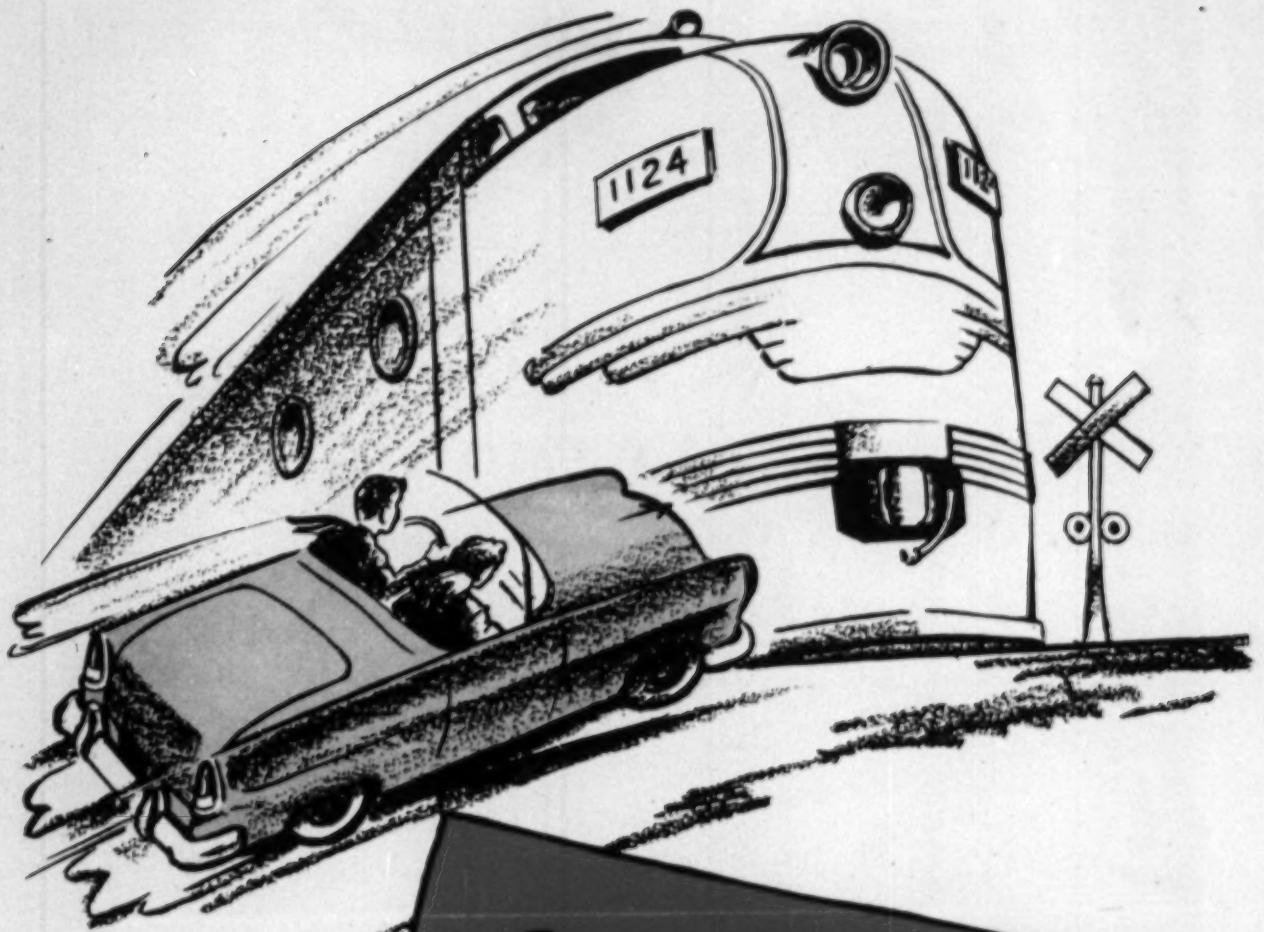
QUANTITY PRICES	1 to 9 copies	10 to 99 copies	100 to 999 copies	1000 or more copies
Subscription, 9 issues, ea.	\$.70	\$.40	\$.37	\$.26
Single issues, ea.09	.05	.046	.034

NATIONAL SAFETY COUNCIL 425 N. MICHIGAN AVE.
CHICAGO 11, ILLINOIS



Watchy says -

HELP TAKE CARE OF BABY!



Don't be a
"LOCO"-MOTIVE
Statistic

